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Mines
and Natural Gas

Reservoir Annual 1987

Miscellaneous Report 88-1

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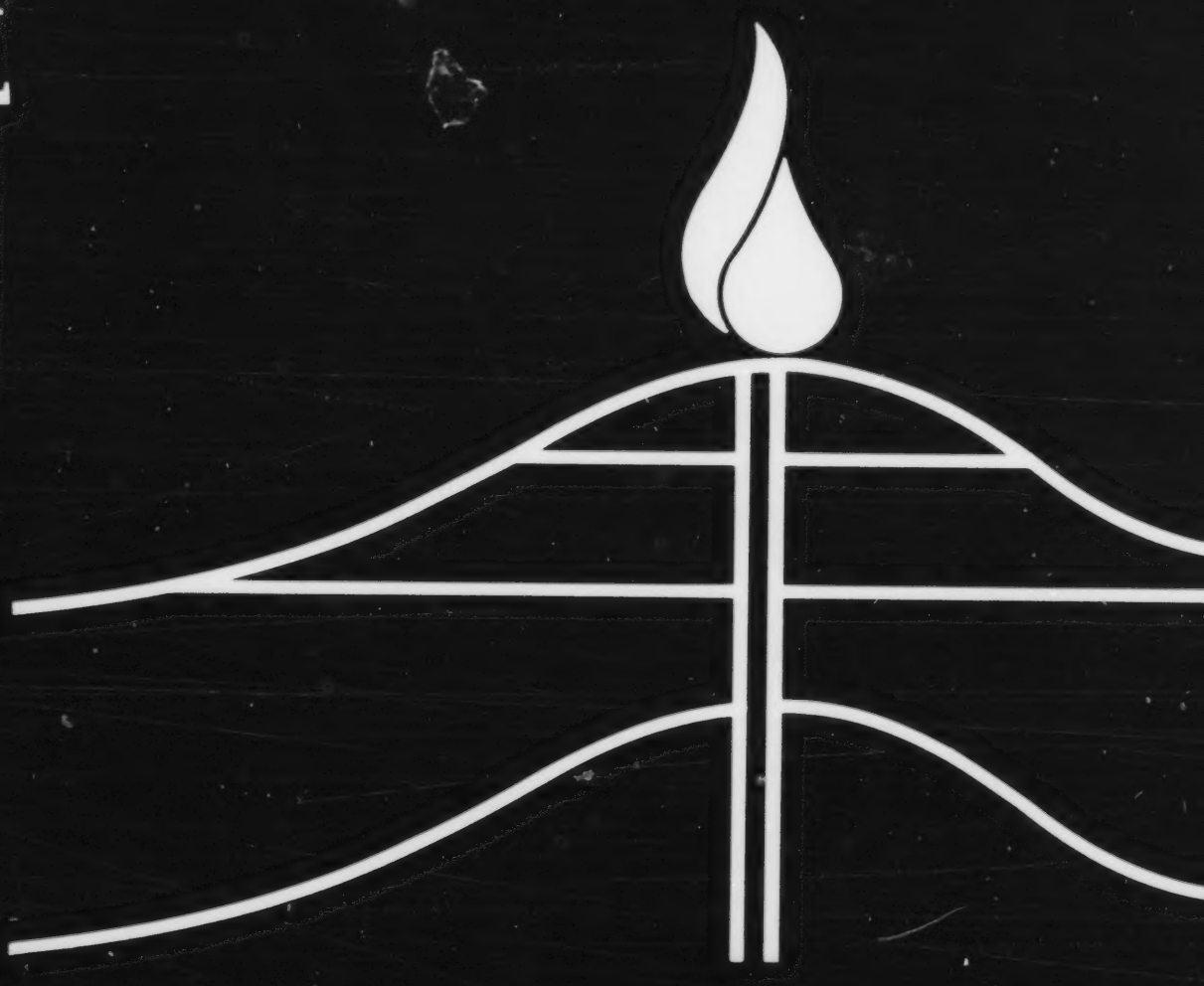
Saskatchewan



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PREFACE

The 1987 Reservoir Annual has been compiled to consolidate pertinent information on all oil and gas reservoirs in Saskatchewan into a convenient reference manual. The main sections of the report contain oil and gas reserves data, development and producing data and information concerning enhanced recovery projects. The remaining sections present related reservoir information.

Publication of the Reservoir Annual commenced in 1963 and has since undergone a number of changes to improve the presentation and to increase the amount of information that is useful to both industry and government.

I would like to acknowledge the assistance of the oil and gas companies operating in Saskatchewan for submitting to the department much of the material that has been used in the preparation of this report.

Patricia A. Smith
Minister of Energy and Mines

Although the Department of Energy and Mines has exercised all reasonable care in the compilation, interpretation and production of this report, it is not possible to ensure total accuracy, and all persons who rely on the information contained herein do so at their own risk. The Department of Energy and Mines and the Government of Saskatchewan do not accept liability for any errors, omissions or inaccuracies that may be included in, or derived from, this report.

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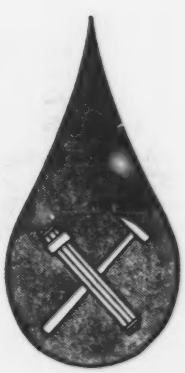
INTRODUCTION



INTRODUCTION

The 1987 Reservoir Annual is published by Saskatchewan Energy and Mines to provide current statistical information with regard to performance and reservoir parameters of Saskatchewan oil and gas pools. The 1987 edition is subdivided into ten sections, each dealing with a specific type of reservoir data. Section B presents maps showing oil and gas pools, production and disposition areas, well spacing areas and other related information. Of considerable importance are sections C and D, which provide reservoir data and reserves for all provincial oil and gas pools broken down by unit and non-unit areas. Section E contains a listing of oil and gas units and provides such information as operator, producing zone, number of active wells and project data such as pattern type, commencement date and injection rates. The section titled "Development Data" presents information on natural depletion mechanism, enhanced recovery projects, well spacing and target areas for all Saskatchewan oil and gas pools. The remaining four sections include illustrations of typical producing well logs, pool pressure data, Maximum Permissive Rate factors and gas plant performance plots. All reserve, production, pool boundary and well spacing information contained in this publication is as of December 31, 1987, unless otherwise noted.

The reserve values contained in the Reservoir Annual are "established reserves" as adopted from the recommendations of The Joint Industry/Government Task Force on Uniform Reserves Terminology. Established reserves are defined as those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist from geological, geophysical or similar information, with reasonable certainty.

Provincial oil production in 1987 exceeded 12 million cubic metres for the first time since 1973. This reflects a continuation of good oil market conditions, and a reasonable level of exploration and development activity. Initial established oil reserves increased by over 12.8 million cubic metres due to the addition of 741 new producing oil wells, 12 new or expanded waterflood projects, and 2 expanded EOR (enhanced oil recovery) projects. This was further increased to about 13.9 million cubic metres because of better definition of existing reserves. The most significant increase in reserves due to drilling was again in Area IV (Weyburn-Estevan). Provincial reserve increases exceeded production for the year by about 1.8 million cubic metres, resulting in a remaining established reserve figure of 113.5 million cubic metres at year end. Table 1 provides a more detailed look at the changes in oil reserves.

Natural gas production in 1987 was 2.56 billion cubic metres, exceeding the 1986 production by 12%. Initial reserves of gas were increased by 4.32 billion cubic metres in 1987, resulting in a net increase of 1.73 billion cubic metres and a remaining established reserves year-end value of 69.28 billion cubic metres. These reserve increases were largely due to the continued high rate of gas well drilling, which resulted in 568 completions in 1987.

The objective of this publication is to provide subscribers in the oil and gas industry with reliable and pertinent information on provincial oil and gas resources and any suggestions or comments on improvements in this regard would be welcomed by Saskatchewan Energy and Mines.

TABLE 1

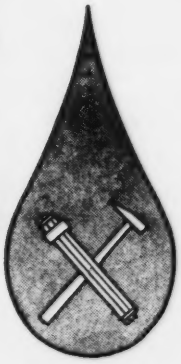
REMAINING OIL RESERVES IN SASKATCHEWAN

(Million Cubic Metres)

Area	Remaining Established Reserves (Dec. 31/86)	1987 Additions to Reserves			1987 Production	Net Change in Reserves During 1987	Remaining Established Reserves (Dec. 31/87)
		Revisions	Drilling	Total			
Area I – Heavy	24.491	+0.504	+0.961	+1.465	2.865	– 1.400	23.091
Area II – Heavy	7.668	+1.516	+0.079	+1.595	0.829	+0.766	8.434
Area II – Light	11.906	– 1.409	+0.601	– 0.808	1.035	– 1.843	10.063
Area III – Medium	15.804	+2.059	+0.832	+2.891	1.898	+0.993	16.797
Area IV – Medium	24.441	+2.298	+2.785	+5.083	2.463	+2.620	27.061
Area IV – Light	27.419	– 0.351	+3.962	+3.611	2.944	+0.667	28.086
PROVINCIAL TOTAL	111.729	+4.617	+9.220	+13.837	12.034	+1.803	113.532

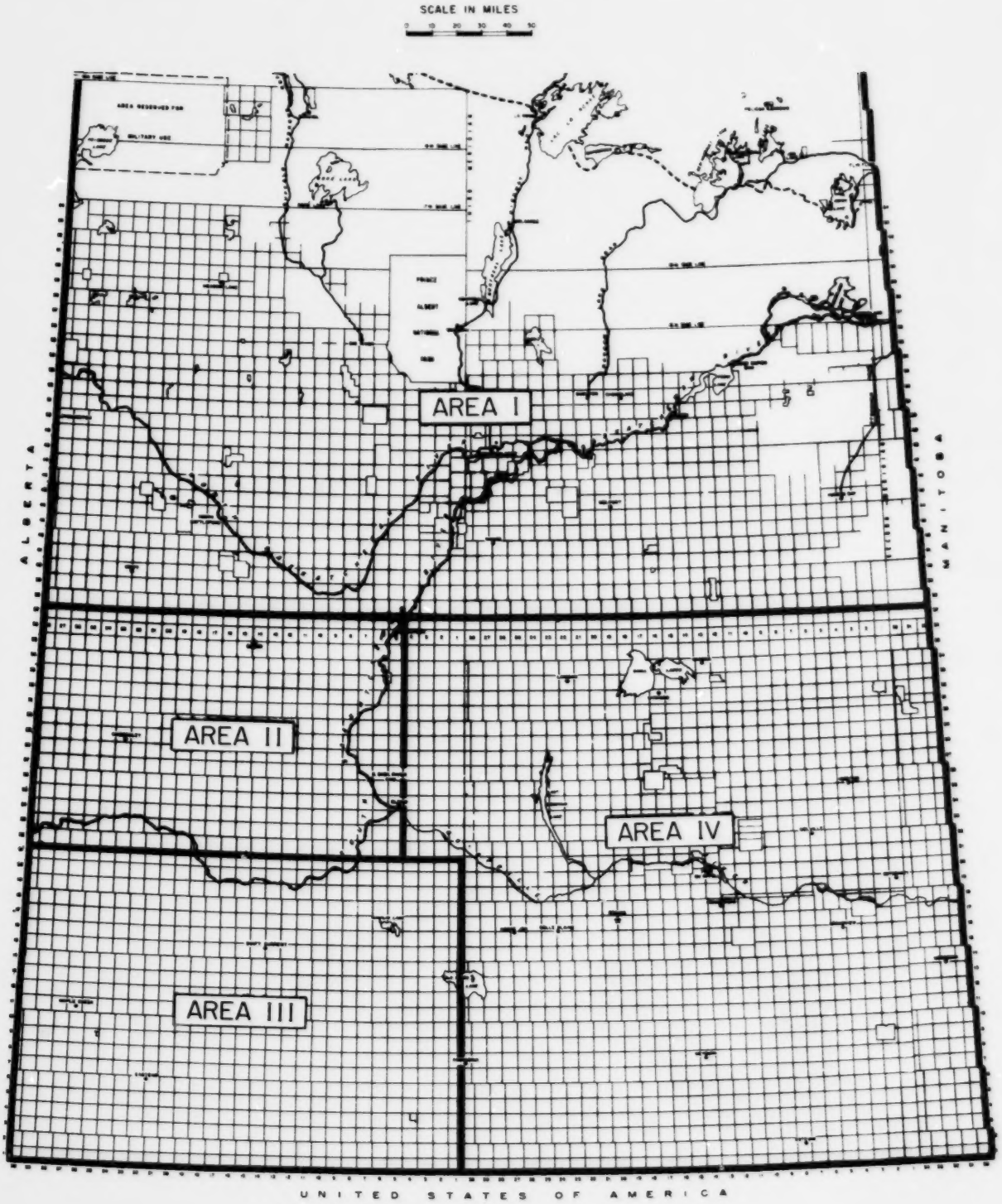
POOL AND AREA

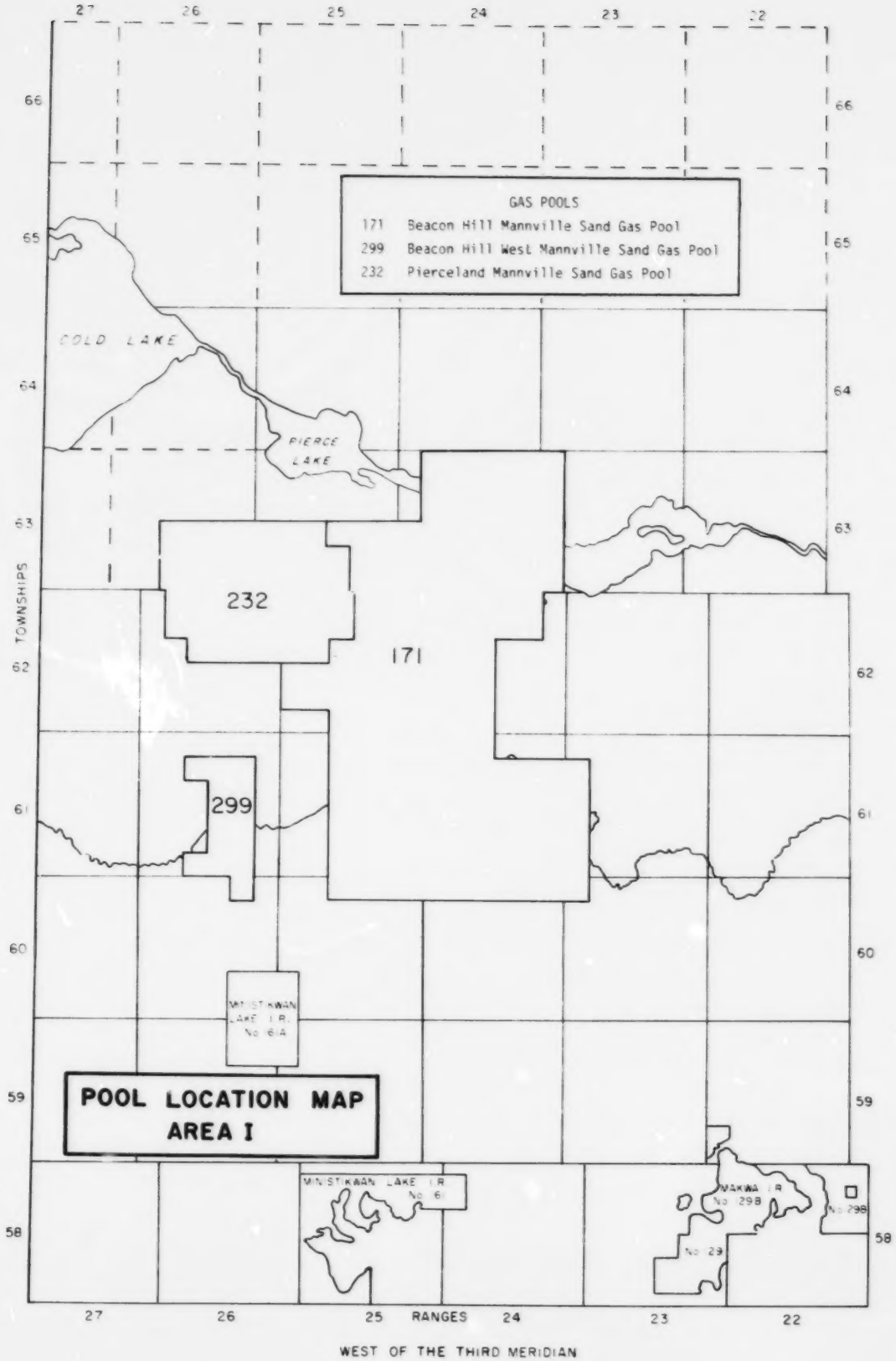
MAPS



SASKATCHEWAN
PETROLEUM AND NATURAL GAS

PRODUCTION AND DISPOSITION AREAS

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171 Beacon Hill Mannville Sand Gas Pool
299 Beacon Hill West Mannville Sand Gas Pool
232 Pierceland Mannville Sand Gas Pool
COLD LAKE
PIERCE LAKE
232
171
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MINISTIKWAN LAKE I.R. No. 61A
MINISTIKWAN LAKE I.R. No. 61
WAKWA I.R. No. 298
No. 298
No. 29
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TOWNSHIPS
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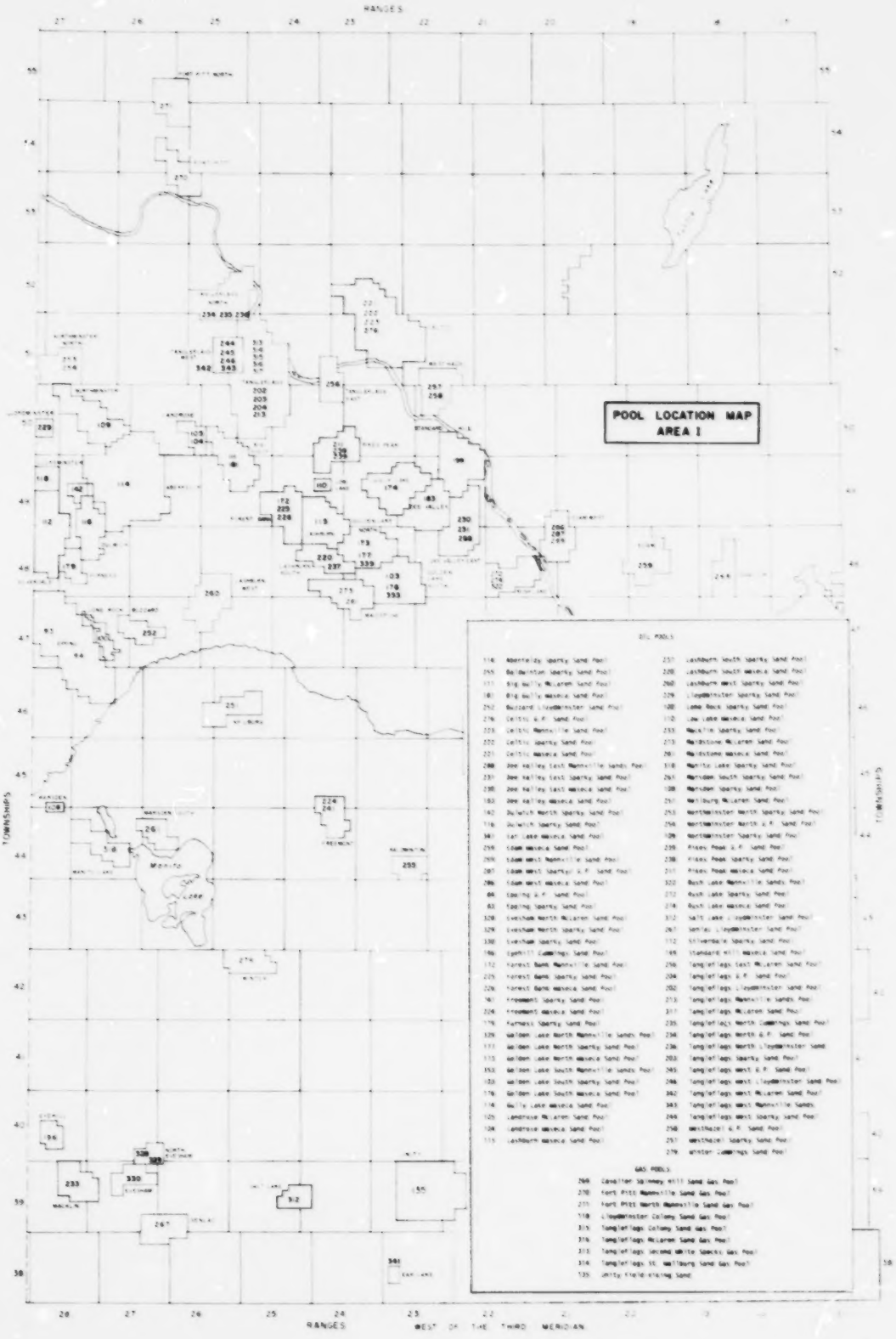
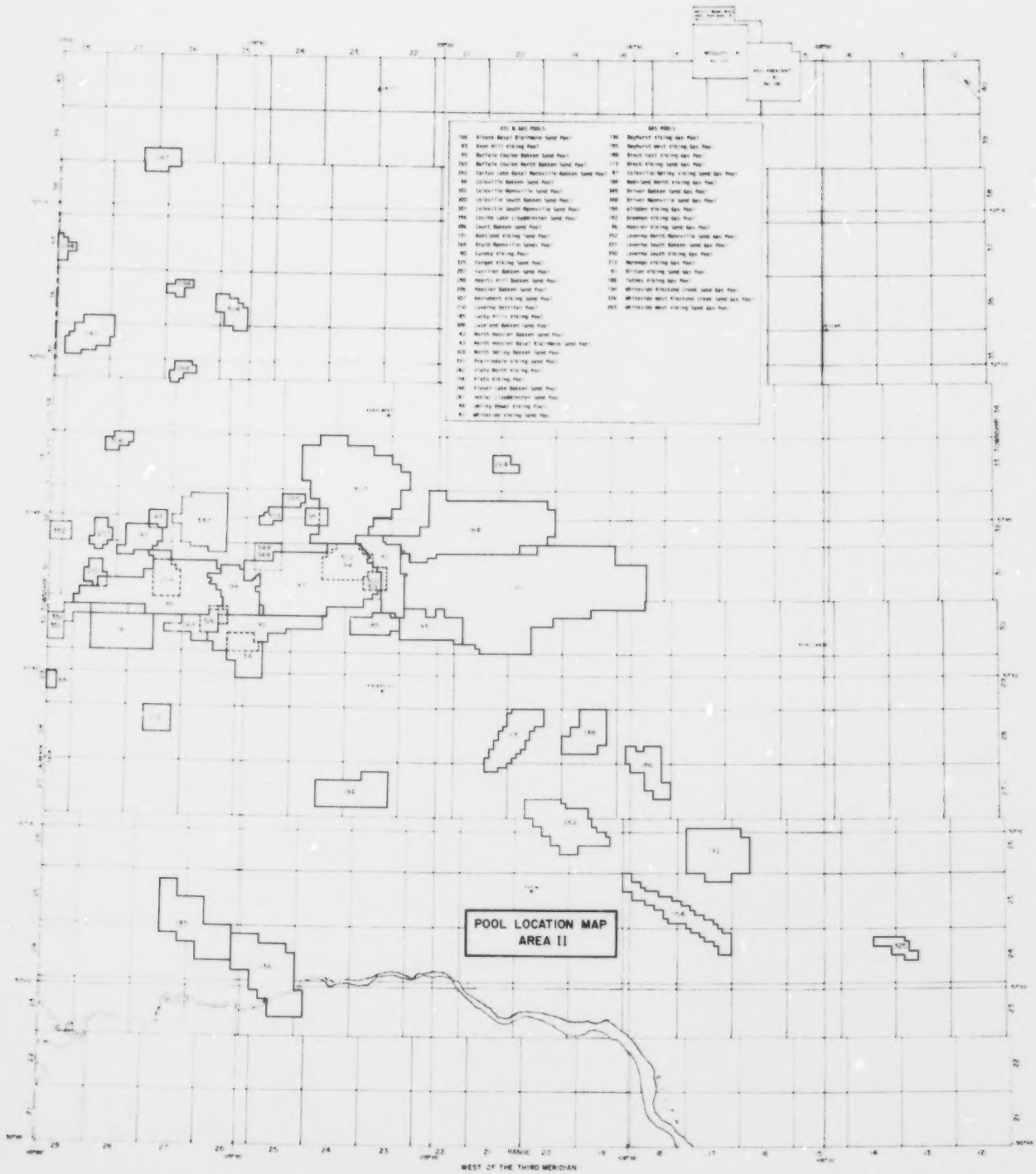
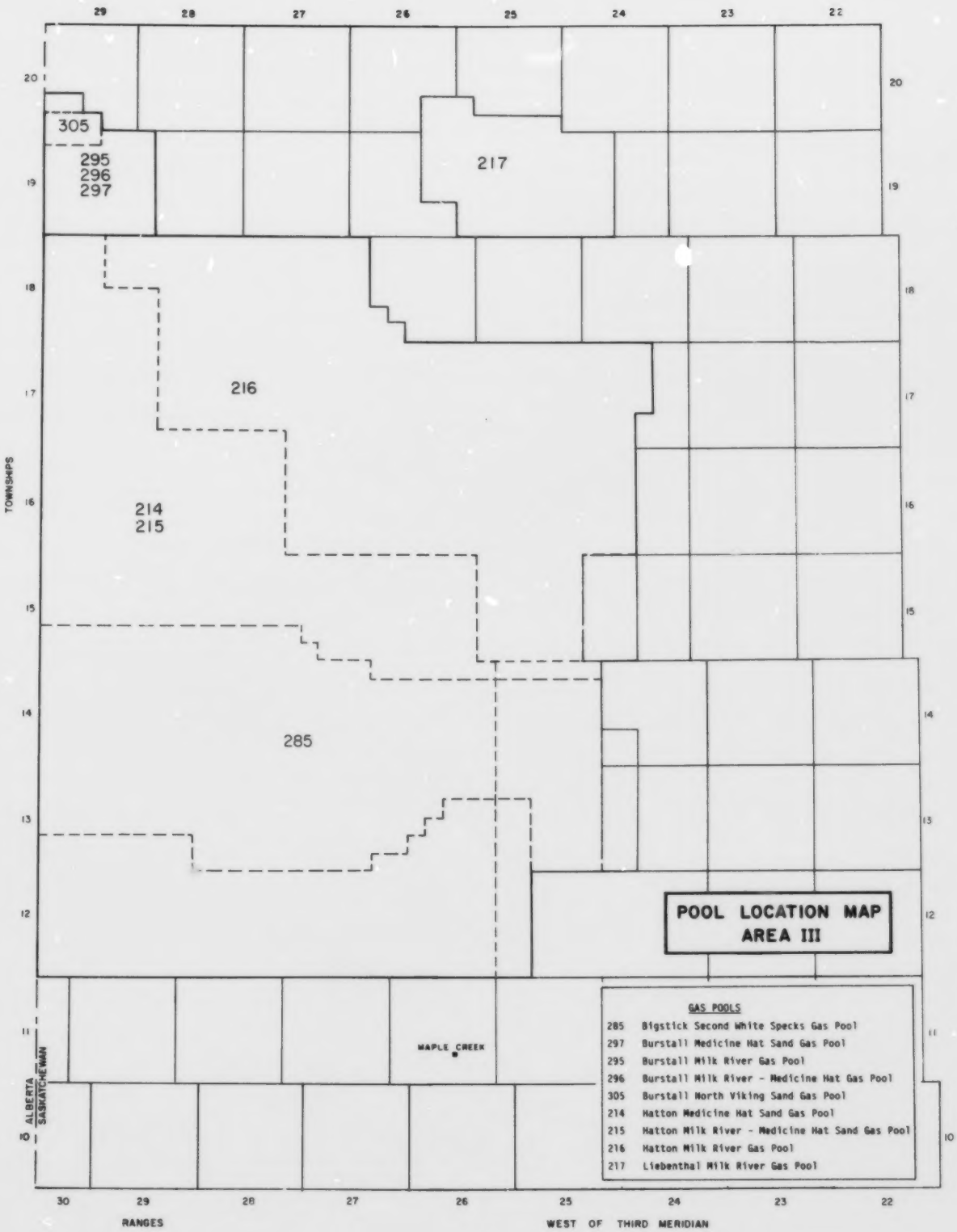
RANGES
WEST OF THE THIRD MERIDIAN


POOL LOCATION MAP
AREA 1
RANGES
TOWNSHIPS
RANGES
WEST OF THE THIRD MERIDIAN


POOL LOCATION MAP
AREA II
RANGE 20
WEST OF THE THIRD MERIDIAN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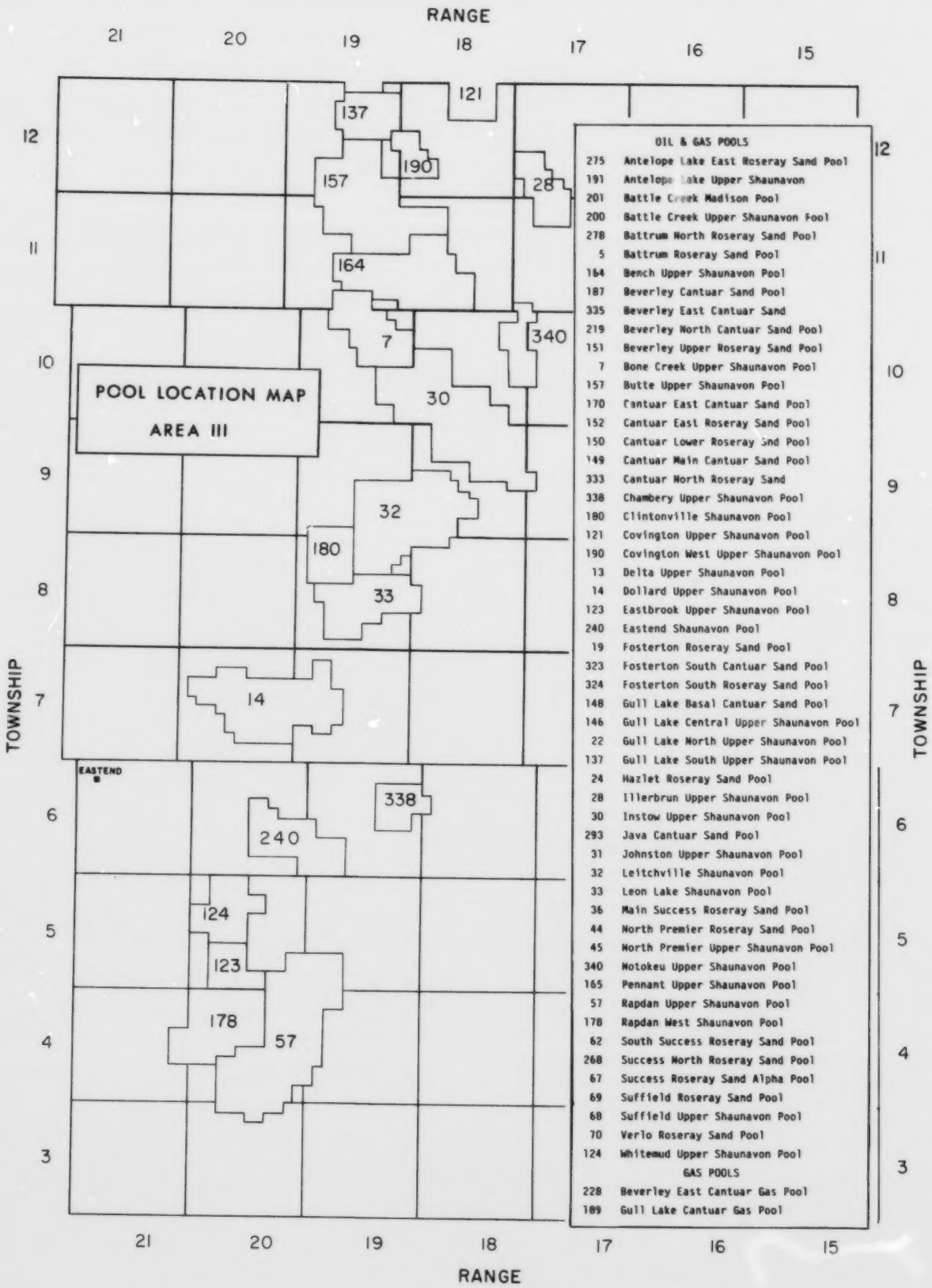
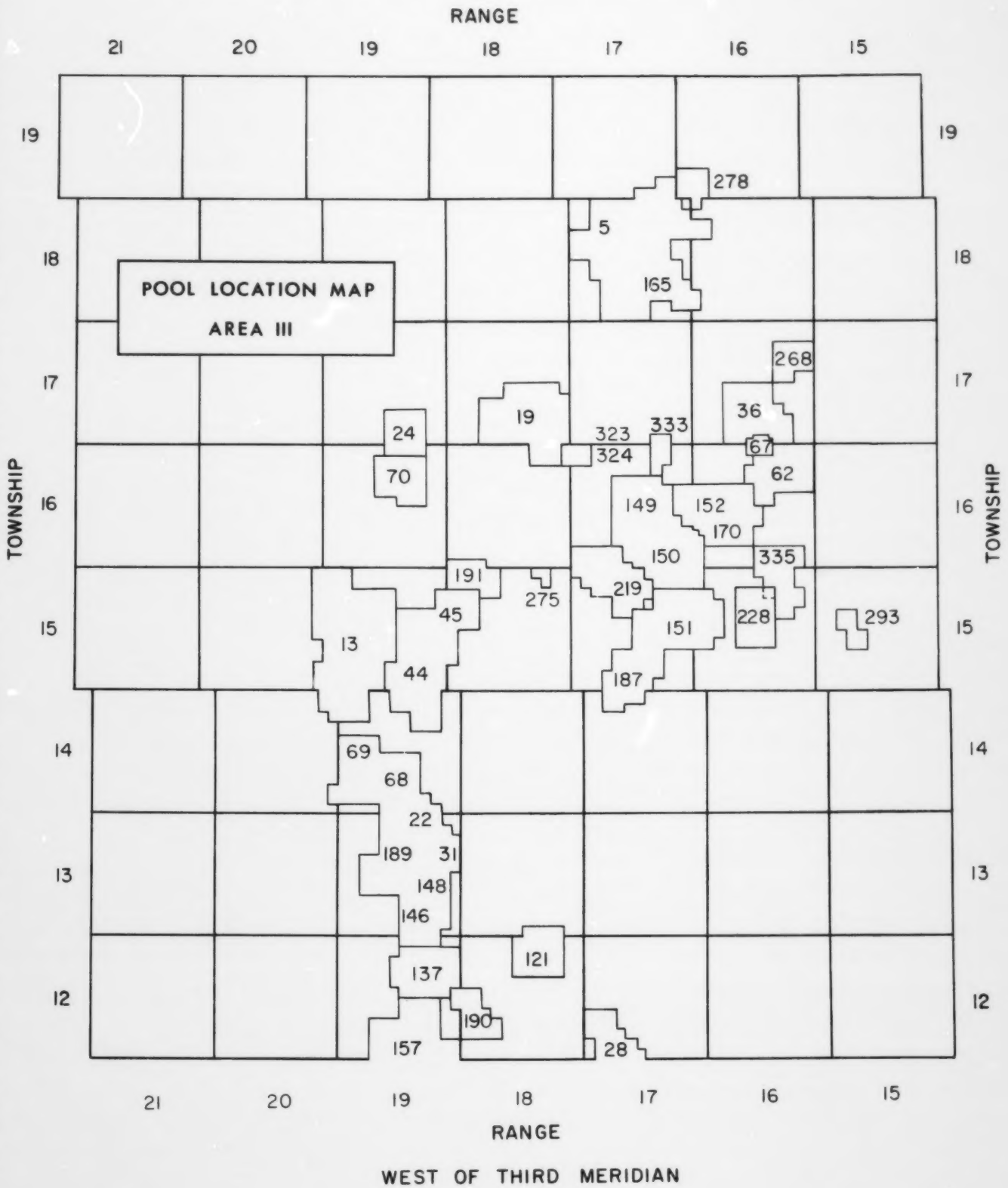
297 Burstall Medicine Hat Sand Gas Pool
295 Burstall Milk River Gas Pool
296 Burstall Milk River - Medicine Hat Gas Pool
305 Burstall North Viking Sand Gas Pool
214 Hatton Medicine Hat Sand Gas Pool
215 Hatton Milk River - Medicine Hat Sand Gas Pool
216 Hatton Milk River Gas Pool
217 Liebenthal Milk River Gas Pool



WEST OF THIRD MERIDIAN


RANGE
21
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TOWNSHIP
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POOL LOCATION MAP
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268
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19
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275
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RANGE
WEST OF THIRD MERIDIAN

OIL & GAS POOLS
AREA IV
POOL LOCATION MAP
AREA IV
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160
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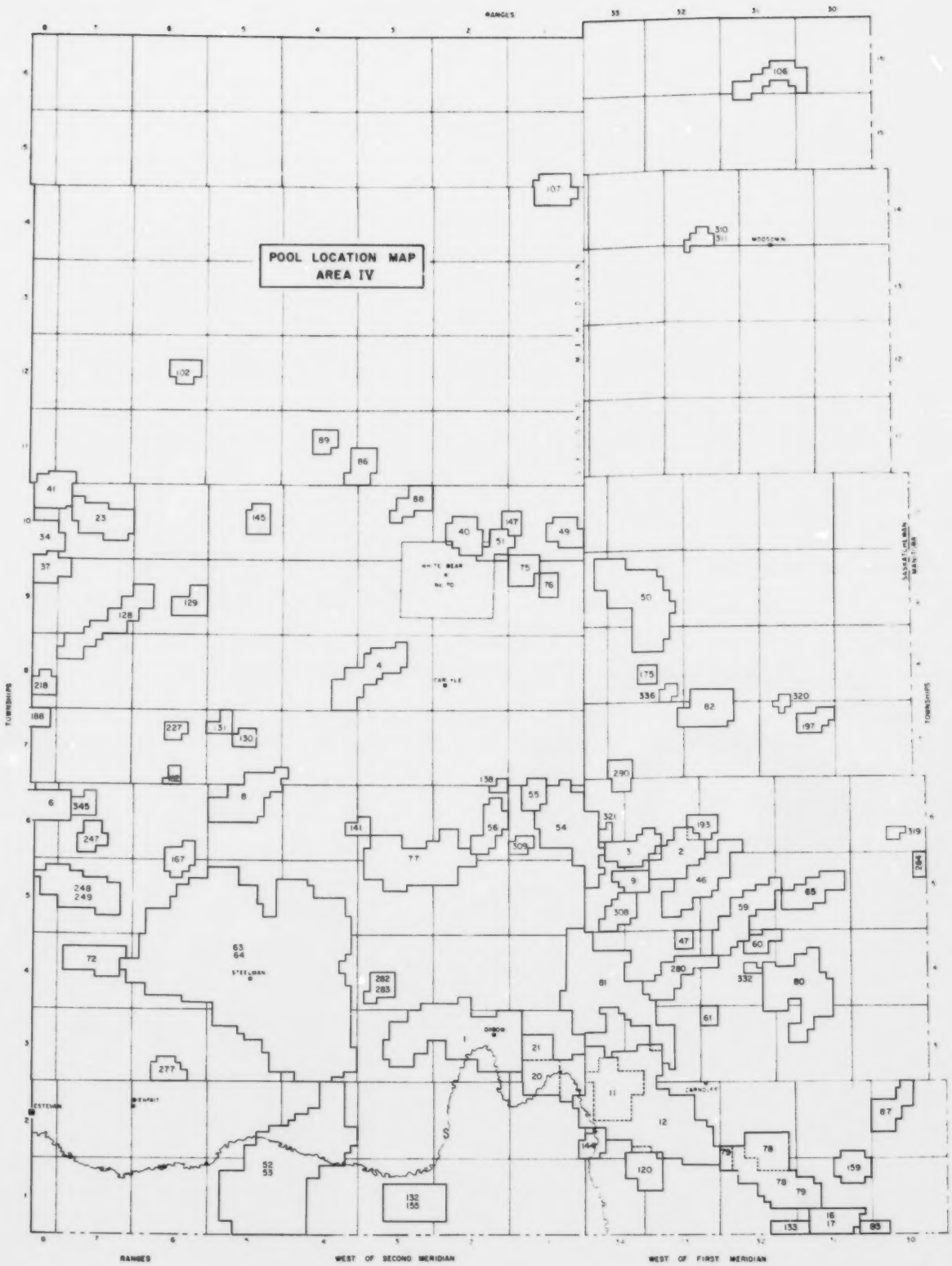
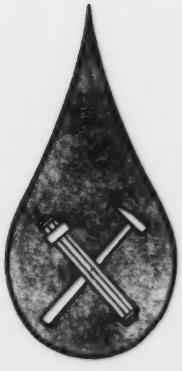
RANGES
WEST OF SECOND MERIDIAN


POOL LOCATION MAP
AREA IV
RANGES
TOWNSHIPS
RANGES WEST OF SECOND MERIDIAN
WEST OF FIRST MERIDIAN
WHITE BEAR
CARLYLE
STEELMAN
DUBUC
CARNDUFF
ESTEVAN
MOOSOMIN

RESERVOIR DATA

RESERVES AND

PRODUCTION – OIL



FIVE YEAR OIL SUMMARY

	1983	1984	1985	1986	1987
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	57.176	61.198	65.070	64.449	65.926
Area II - Heavy	18.146	18.740	19.077	19.334	20.930
Area II - Light	19.299	22.208	23.730	27.713	26.912
Area III - Medium	89.635	90.700	93.096	95.454	98.344
Area IV - Medium	100.593	101.844	103.600	106.070	109.997
Area IV - Light	119.565	124.200	130.043	133.089	137.877
PROVINCIAL TOTAL	402.414	418.890	434.617	446.109	459.986
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	26.029	27.268	28.074	24.491	23.091
Area II - Heavy	6.820	8.611	8.180	7.668	8.434
Area II - Light	6.877	8.836	9.137	11.908	10.063
Area III - Medium	15.341	14.587	15.205	15.804	18.797
Area IV - Medium	25.145	24.442	24.186	24.441	27.081
Area IV - Light	21.906	24.031	27.144	27.419	28.088
PROVINCIAL TOTAL	102.118	107.775	111.926	111.729	113.532
YEARLY PRODUCTION (Million Cubic Metres)					
Area I - Heavy	2.479	2.780	3.063	2.956	2.865
Area II - Heavy	0.730	0.801	0.771	0.766	0.829
Area II - Light	0.870	0.950	1.218	1.208	1.035
Area III - Medium	1.622	1.811	1.781	1.757	1.898
Area IV - Medium	1.704	1.949	2.047	2.140	2.463
Area IV - Light	2.330	2.502	2.703	2.842	2.944
PROVINCIAL TOTAL	9.535	10.793	11.583	11.669	12.034
NUMBER OF PRODUCING WELLS					
Area I - Heavy	3 148	3 531	4 098	3 874	3 859
Area II - Heavy	729	794	892	844	811
Area II - Light	1 985	2 818	3 750	3 868	4 015
Area III - Medium	1 022	1 118	1 279	1 263	1 267
Area IV - Medium	1 827	1 910	2 240	2 354	2 393
Area IV - Light	2 465	2 785	3 179	3 278	3 308
PROVINCIAL TOTAL	10 976	12 954	15 438	15 501	15 453
AVERAGE DECEMBER PRODUCTION (Cubic Metres Per Day)					
Area I - Heavy	7 043	7 730	9 225	8 066	8 323
Area II - Heavy	2 037	2 127	2 073	2 167	2 324
Area II - Light	2 054	2 824	3 652	3 025	2 932
Area III - Medium	4 629	4 495	4 751	5 402	5 373
Area IV - Medium	5 011	5 479	4 706	6 059	6 096
Area IV - Light	6 388	7 251	7 426	8 065	8 326
PROVINCIAL TOTAL	27 163	29 906	31 833	32 784	33 374

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD DEC 31/87	REMAINING RESERVES	1987 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
AREA I - HEAVY											
ABERFELDY	SPARKY SAND (UNIT)	55.702	8.00	2.00	10.00	4.456	1.114	5.570	5.250	0.320	113.488
	SPARKY SAND (S. ABFDY SPKY VOL UNIT)	23.605	6.10	1.00	7.10	1.440	0.236	1.676	1.498	0.178	27.853
	SPARKY SAND (NON-UNIT)	18.131	2.70	0.00	2.70	0.490	0.000	0.490	0.341	0.149	20.718
BALDWINTON	SPARKY SAND	2.695	3.20	0.00	3.20	0.086	0.000	0.086	0.055	0.031	4.951
BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)	9.860	5.70	2.30	8.00	0.562	0.227	0.789	0.789	0.099	17.840
	WASECA SAND (VOLUNTARY UNIT NO. 1)	3.693	1.80	0.90	2.70	0.066	0.033	0.099			
	MCLAREN SAND (NON-UNIT)	1.570	2.00	0.00	2.00	0.031	0.000	0.031	0.029	0.002	0.360
	WASECA SAND (NON-UNIT)	0.351	4.50	0.00	4.50	0.016	0.000	0.016	0.012	0.004	0.538
BUZZARD	LLOYDMINSTER SAND	5.237	4.30	0.00	4.30	0.225	0.000	0.225	0.132	0.093	17.953
CELTIC	G.P. SAND	33.017	5.70	0.30	6.00	1.882	0.099	1.981	0.421		114.368
	SPARKY SAND	46.126	1.30	0.00	1.30	0.600	0.000	0.600	0.175	2.867	33.648
	WASECA SAND	90.361	1.30	0.30	1.60	1.175	0.271	1.446	0.533		110.462
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.031		3.747
DEE VALLEY	WASECA SAND	19.209	6.30	0.00	6.30	1.210	0.000	1.210	0.377	0.833	43.932
DEE VALLEY EAST	SPARKY SAND	17.969	0.70	0.00	0.70	0.126	0.000	0.126	0.029		3.477
	WASECA SAND	10.122	3.32	0.00	3.32	0.336	0.000	0.336	0.069	0.351	10.472
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.013		1.911
DULWICH	SPARKY SAND	14.996	8.00	3.80	11.80	1.200	0.570	1.770	1.694	0.076	17.404
DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)	1.341	4.50	11.50	16.00	0.060	0.154	0.214	0.211	0.003	0.499
	SPARKY SAND (NON-UNIT)	0.896	0.20	0.00	0.20	0.002	0.000	0.002	0.001	0.001	0.564
EAR LAKE	WASECA SAND	1.041	8.60	0.00	8.60	0.090	0.000	0.090	0.028	0.062	7.248
EDAM	WASECA SAND	11.225	0.70	0.00	0.70	0.079	0.000	0.079	0.036	0.043	2.310
EDAM WEST	SPARKY/G.P. SAND	25.921	4.00	0.00	4.00	1.037	0.000	1.037	0.306		71.114
	WASECA SAND	13.912	4.20	0.00	4.20	0.584	0.000	0.584	0.140	1.100	48.224
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.075		20.275
EPPING	G.P. SAND (S. EPPING UNIT)	4.310	3.00	1.80	4.80	0.129	0.078	0.207	2.560	0.374	45.619
	SPARKY SAND (S. EPPING UNIT)	23.924	5.00	6.40	11.40	1.196	1.531	2.727			
	SPARKY SAND (SW EPPING VOL UNIT 1)	10.778	5.40	5.00	10.40	0.582	0.539	1.121	0.892	0.229	24.212
	G.P. SAND (NON-UNIT)	19.541	2.40	0.00	2.40	0.469	0.000	0.469	0.398	0.071	11.273
	SPARKY SAND (NON-UNIT)	37.509	4.90	0.00	4.90	1.838	0.000	1.838	1.632	0.206	41.429
EVESHAM	SPARKY SAND	3.083	4.00	0.00	4.00	0.123	0.000	0.123	0.059	0.064	10.780
EVESHAM NORTH	MCLAREN SAND	1.073	3.20	0.00	3.20	0.034	0.000	0.034	0.011	0.023	3.749
	SPARKY SAND	1.174	10.00	0.00	10.00	0.117	0.000	0.117	0.061	0.056	8.782
EYEHILL	CUMMINGS SAND	10.228	1.00	2.90	3.90	0.102	0.297	0.399	0.166	0.233	22.457
FOREST BANK	SPARKY SAND	13.166	2.70	0.00	2.70	0.355	0.000	0.355	0.159		8.868
	WASECA SAND	8.960	3.46	0.00	3.46	0.310	0.000	0.310	0.163	0.271	9.344
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.072		5.136
FREEMONT	SPARKY SAND	3.467	6.00	0.00	6.00	0.208	0.000	0.208	0.106	0.102	12.544
	WASECA SAND	3.660	5.50	0.00	5.50	0.201	0.000	0.201	0.161	0.040	9.152
FURNESS	SPARKY SAND	11.305	5.20	0.00	5.20	0.588	0.000	0.588	0.421	0.167	19.843
GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)	11.403	4.20	0.70	4.90	0.479	0.080	0.559	1.589	0.253	39.646
	WASECA SAND (GOLDEN LAKE VOL UNIT)	13.950	7.60	1.60	9.20	1.060	0.223	1.283			
	SPARKY SAND (NON-UNIT)	11.121	2.40	0.00	2.40	0.267	0.000	0.267	0.153		18.650
	WASECA SAND (NON-UNIT)	11.315	3.64	0.00	3.64	0.412	0.000	0.412	0.342	0.170	8.832
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.014		3.463
GOLDEN LAKE SOUTH	SPARKY SAND	42.841	1.00	1.20	2.20	0.428	0.514	0.942	0.687		21.401
	WASECA SAND	24.398	10.15	0.20	10.35	2.476	0.049	2.525	1.697	1.041	85.979
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.042		6.616
GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)	10.986	7.00	4.40	11.40	0.769	0.483	1.252	0.794	0.458	47.545
	WASECA SAND (NON-UNIT)	17.080	7.30	0.00	7.30	1.247	0.000	1.247	0.803	0.444	56.557
LANDROSE	MCLAREN SAND	5.051	2.50	0.00	2.50	0.126	0.000	0.126	0.124	0.002	1.218
	WASECA SAND	3.281	3.60	0.00	3.60	0.118	0.000	0.118	0.116	0.002	1.490

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
									AREA I - HEAVY	
4209	4.42	35.0	13.0	1.017	968	535	CRETACEOUS	1956	ABERFELDY	SPARKY SAND (UNIT)
1522	5.18	35.0	13.0	1.017	–	–	CRETACEOUS	–		SPARKY SAND (S. ABFDY SPKY VOL UNIT)
1101	5.50	35.0	13.0	1.017	–	–	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
372	4.60	25.0	30.0	1.111	970	599	CRETACEOUS	1969	BALDWINTON	SPARKY SAND
1101	2.99	36.0	15.3	1.018	965	496	CRETACEOUS	1962	BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)
518	2.38	36.0	15.3	1.018	965	479	CRETACEOUS	1962		WASECA SAND (VOLUNTARY UNIT NO. 1)
146	3.59	36.0	15.3	1.018	981	496	CRETACEOUS	–		MCLAREN SAND (NON-UNIT)
16	7.32	36.0	15.3	1.018	972	479	CRETACEOUS	–		WASECA SAND (NON-UNIT)
809	4.11	25.0	30.0	1.111	971	579	CRETACEOUS	1978	BUZZARD	LLOYDMINSTER SAND
2637	5.34	35.0	31.0	1.030	969	477	CRETACEOUS	1968	CELTIC	G.P. SAND
4065	4.30	35.0	24.0	1.008	975	463	CRETACEOUS	1968		SPARKY SAND
5043	6.79	35.0	24.0	1.008	968	451	CRETACEOUS	1968		WASECA SAND
0	0.00	0.0	0.0	1.008	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1736	3.82	35.0	16.0	1.015	976	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
1306	4.75	35.0	16.0	1.015	969	490	CRETACEOUS	1968	DEE VALLEY EAST	SPARKY SAND
1120	3.12	35.0	16.0	1.015	971	464	CRETACEOUS	1970		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1862	3.11	34.0	15.0	1.116	962	556	CRETACEOUS	1948	DULWICH	SPARKY SAND
113	3.96	35.0	13.0	1.016	957	551	CRETACEOUS	1954	DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)
49	6.10	35.0	13.0	1.016	–	–	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
162	2.91	35.0	30.0	1.110	977	656	CRETACEOUS	1979	EAR LAKE	WASECA SAND
1008	7.07	25.0	30.0	1.111	988	431	CRETACEOUS	1972	EDAM	WASECA SAND
1586	8.07	30.0	25.0	1.111	973	467	CRETACEOUS	1982	EDAM WEST	SPARKY/G.P. SAND
1748	3.93	30.0	25.0	1.111	978	447	CRETACEOUS	–		WASECA SAND
0	0.00	0.0	0.0	1.111	968	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1473	1.04	35.0	18.0	1.020	962	583	CRETACEOUS	1951	EPPING	G.P. SAND (S. EPPING UNIT)
1651	5.15	35.0	18.0	1.020	964	563	CRETACEOUS	1951		SPARKY SAND (S. EPPING UNIT)
923	4.15	35.0	18.0	1.020	–	–	CRETACEOUS	–		SPARKY SAND (SW EPPING VOL UNIT 1)
2315	3.00	35.0	18.0	1.020	962	–	CRETACEOUS	–		G.P. SAND (NON-UNIT)
2898	4.60	35.0	18.0	1.020	968	–	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
469	2.52	35.0	23.0	1.033	958	719	CRETACEOUS	1969	EVESHAM	SPARKY SAND
178	2.59	35.0	30.0	1.053	969	686	CRETACEOUS	1982	EVESHAM NORTH	MCLAREN SAND
194	2.32	35.0	23.0	1.033	951	734	CRETACEOUS	1976		SPARKY SAND
376	9.82	34.0	16.0	1.031	970	746	CRETACEOUS	1971	EYEHILL	CUMMINGS SAND
1295	3.51	35.0	16.0	1.015	982	526	CRETACEOUS	1961	FOREST BANK	SPARKY SAND
1093	2.83	35.0	16.0	1.015	979	507	CRETACEOUS	1963		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
469	2.78	35.0	20.0	1.053	963	636	CRETACEOUS	1976	FREEMONT	SPARKY SAND
437	3.15	35.0	20.0	1.053	958	620	CRETACEOUS	1976		WASECA SAND
745	5.34	34.0	15.0	1.017	967	566	CRETACEOUS	1970	FURNESS	SPARKY SAND
1198	3.43	35.0	20.0	1.009	977	506	CRETACEOUS	1964	GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)
1198	4.02	35.0	16.0	1.015	964	481	CRETACEOUS	1964		WASECA SAND (GOLDEN LAKE VOL UNIT)
1092	3.67	35.0	20.0	1.009	970	–	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
939	4.16	35.0	16.0	1.015	963	–	CRETACEOUS	–		WASECA SAND (NON-UNIT)
0	0.00	0.0	0.0	1.009	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
2962	5.10	35.0	18.0	1.012	978	490	CRETACEOUS	1964	GOLDEN LAKE SOUTH	SPARKY SAND
2865	2.94	35.0	16.0	1.015	966	473	CRETACEOUS	1964		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
874	4.33	35.7	16.0	1.033	963	472	CRETACEOUS	1949	GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)
1279	4.60	35.7	16.0	1.033	969	–	CRETACEOUS	–		WASECA SAND (NON-UNIT)
534	4.15	30.0	20.0	1.053	981	513	CRETACEOUS	1950	LANDROSE	MCLAREN SAND
308	3.67	36.0	18.0	1.017	983	521	CRETACEOUS	1950		WASECA SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)	18.059	3.60	3.00	6.60	0.650	0.542	1.192	0.873	0.319	45.974
	WASECA SAND (NON-UNIT)	9.026	2.00	0.00	2.00	0.181	0.000	0.181	0.150	0.031	6.886
LASHBURN SOUTH	SPARKY SAND	2.683	1.30	0.00	1.30	0.035	0.000	0.035	0.028	0.007	1.326
	WASECA SAND	9.539	3.90	0.00	3.90	0.372	0.000	0.372	0.199	0.173	23.593
LASHBURN WEST	SPARKY SAND	11.092	0.70	0.00	0.70	0.078	0.000	0.078	0.043	0.035	3.622
LLOYDMINSTER	SPARKY SAND	4.125	4.20	0.00	4.20	0.173	0.000	0.173	0.155	0.018	7.590
LONE ROCK	SPARKY SAND	13.732	7.80	2.70	10.50	1.071	0.371	1.442	1.323	0.119	38.485
LOW LAKE	WASECA SAND	1.320	5.90	0.00	5.90	0.078	0.000	0.078	0.063	0.015	4.008
MACKLIN	SPARKY SAND	9.437	5.70	0.00	5.70	0.538	0.000	0.538	0.371	0.167	20.107
MAIDSTONE	MCLAREN SAND	7.238	6.80	0.00	6.80	0.492	0.000	0.492	0.183	0.309	24.020
	WASECA SAND	2.389	3.30	0.00	3.30	0.079	0.000	0.079	0.040	0.039	5.373
MANITO LAKE	SPARKY SAND	8.261	8.30	0.00	8.30	0.686	0.000	0.686	0.235	0.451	43.784
MARSDEN	SPARKY SAND	1.969	5.90	0.00	5.90	0.116	0.000	0.116	0.108	0.008	1.806
MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)	10.830	4.60	10.80	15.40	0.498	1.170	1.668	0.386	1.282	52.663
	SPARKY SAND (NON-UNIT)	4.749	8.40	0.00	8.40	0.399	0.000	0.399	0.101	0.298	27.614
NEILBURG	MCLAREN SAND	9.858	11.00	0.00	11.00	1.084	0.000	1.084	0.446	0.638	82.363
NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)	10.939	3.50	4.00	7.50	0.383	0.438	0.821	0.777	0.044	12.958
	SPARKY SAND (NON-UNIT)	8.559	1.60	0.20	1.80	0.137	0.017	0.154	0.113	0.041	10.204
NORTHMINSTER NORTH	G.P. SAND	2.248	0.60	0.00	0.60	0.013	0.000	0.013	0.012	0.001	0.521
	SPARKY SAND	6.715	3.30	0.00	3.30	0.222	0.000	0.222	0.083	0.139	9.217
PIKES PEAK	G.P. SAND	4.794	6.20	0.00	6.20	0.297	0.000	0.297	0.209	0.088	14.794
	SPARKY SAND	2.286	0.50	0.00	0.50	0.011	0.000	0.011	0.010	0.001	0.500
	WASECA SAND	19.682	1.40	9.60	11.00	0.276	1.889	2.165	1.417	0.748	260.474
RUSH LAKE	SPARKY SAND	8.832	3.10	0.00	3.10	0.274	0.000	0.274	0.091		16.761
	WASECA SAND	6.389	2.60	0.00	2.60	0.166	0.000	0.166	0.052	0.275	10.283
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.022		12.470
SALT LAKE	LLOYDMINSTER SAND	8.050	11.30	0.00	11.30	0.910	0.000	0.910	0.241	0.669	81.552
SENLAC	LLOYDMINSTER SAND	11.331	5.80	0.00	5.80	0.657	0.000	0.657	0.496	0.161	56.660
SILVERDALE	SPARKY SAND	20.075	6.20	0.80	7.00	1.245	0.161	1.406	1.297	0.109	24.863
STANDARD HILL	WASECA SAND	20.711	7.90	0.00	7.90	1.636	0.000	1.636	1.077	0.559	75.321
TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)	4.001	5.50	3.20	8.70	0.220	0.128	0.348	0.252	0.096	15.325
	G.P. SAND (VOL UNIT NO. 3)	4.857	5.60	0.00	5.60	0.272	0.000	0.272	0.145	0.127	14.593
	LLOYDMINSTER SD (VOL UNIT NO. 3)	5.743	4.10	0.00	4.10	0.235	0.000	0.235	0.194	0.041	10.378
	MCLAREN SAND (VOL UNIT NO. 3)	0.212	3.80	0.00	3.80	0.008	0.000	0.008	0.008	0.000	0.163
	SPARKY SAND (VOL UNIT NO. 3)	4.857	1.50	0.00	1.50	0.073	0.000	0.073	0.031	0.042	4.149
	G.P. SAND (NON-UNIT)	43.237	6.40	0.50	6.90	2.767	0.216	2.983	1.450		106.334
	LLOYDMINSTER SAND (NON-UNIT)	42.971	4.10	0.00	4.10	1.762	0.000	1.762	0.900		65.001
	MCLAREN SAND (NON-UNIT)	5.505	3.70	0.00	3.70	0.204	0.000	0.204	0.065	2.805	5.478
	SPARKY SAND (NON-UNIT)	12.698	6.50	0.00	6.50	0.825	0.000	0.825	0.255		24.752
	MANNVILLE SD (COMMINGLED) (NON-UNIT)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.299		21.054
TANGLEFLAGS EAST	MCLAREN SAND	1.879	5.80	0.00	5.80	0.109	0.000	0.109	0.066	0.043	5.686
TANGLEFLAGS NORTH	CUMMINGS SAND	5.549	3.20	0.00	3.20	0.178	0.000	0.178	0.083	0.095	10.734
	G.P. SAND	3.656	0.50	0.00	0.50	0.018	0.000	0.018	0.014	0.004	1.971
	LLOYDMINSTER SAND	23.109	2.80	0.00	2.80	0.647	0.000	0.647	0.275	0.372	40.419
TANGLEFLAGS WEST	G.P. SAND	2.401	0.70	0.00	0.70	0.017	0.000	0.017	0.012	0.005	1.087
	LLOYDMINSTER SAND	4.717	3.40	0.00	3.40	0.160	0.000	0.160	0.090	0.070	9.920
	MCLAREN SAND	0.620	1.20	0.00	1.20	0.007	0.000	0.007	0.006	0.001	0.328
	SPARKY SAND	1.909	4.60	0.00	4.60	0.088	0.000	0.088	0.054	0.034	4.410
WESTHAZEL	G.P.SAND	8.092	2.60	0.00	2.60	0.210	0.000	0.210	0.088	0.122	16.387
	SPARKY SAND	8.165	3.90	0.00	3.90	0.318	0.000	0.318	0.144	0.174	24.619
WINTER	CUMMINGS SAND	4.577	0.68	0.00	0.68	0.031	0.000	0.031	0.025	0.006	1.622
MISCELLANEOUS	BIRDBEAR	0.084	3.60	0.00	3.60	0.003	0.000	0.003	0.001	0.002	0.587
	COLONY SAND	11.396	1.10	0.00	1.10	0.125	0.000	0.125	0.060	0.065	11.520
	CUMMINGS SAND	17.619	0.40	0.00	0.40	0.070	0.000	0.070	0.053	0.017	3.538

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
1263	6.22	30.0	21.0	1.031	962	518	CRETACEOUS	1960	LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)
631	4.89	35.0	15.0	1.017	963	–	CRETACEOUS	–		WASECA SAND (NON-UNIT)
437	2.23	35.0	20.0	1.017	983	534	CRETACEOUS	1967	LASHBURN SOUTH	SPARKY SAND
712	4.58	35.0	15.0	1.017	979	524	CRETACEOUS	1971		WASECA SAND
1551	4.54	25.0	30.0	1.111	991	537	CRETACEOUS	1979	LASHBURN WEST	SPARKY SAND
243	5.67	35.0	13.0	1.017	965	556	CRETACEOUS	1952	LLOYDMINSTER	SPARKY SAND
939	5.49	33.0	15.0	1.053	960	572	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
146	3.65	36.0	30.0	1.017	971	509	CRETACEOUS	1950	LOW LAKE	WASECA SAND
1325	2.73	35.0	23.0	1.033	947	712	CRETACEOUS	1976	MACKLIN	SPARKY SAND
1734	2.65	25.0	30.0	1.111	963	500	CRETACEOUS	1978	MAIDSTONE	MCLAREN SAND
534	2.84	25.0	30.0	1.111	973	503	CRETACEOUS	1981		WASECA SAND
1295	4.05	25.0	30.0	1.111	965	605	CRETACEOUS	1970	MANITO LAKE	SPARKY SAND
162	4.57	35.0	20.0	1.053	982	606	CRETACEOUS	1949	MARSDEN	SPARKY SAND
518	9.58	30.0	25.0	1.031	946	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)
340	6.40	30.0	25.0	1.031	946	625	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
1327	3.93	30.0	30.0	1.111	964	570	CRETACEOUS	1978	NEILBURG	MCLAREN SAND
987	3.90	34.0	15.0	1.017	976	541	CRETACEOUS	1959	NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)
502	6.00	34.0	15.0	1.017	967	–	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
453	3.15	25.0	30.0	1.111	984	543	CRETACEOUS	1961	NORTHMINSTER NORTH	G.P. SAND
907	4.70	25.0	30.0	1.111	970	524	CRETACEOUS	1961		SPARKY SAND
680	3.03	35.0	30.0	1.053	970	530	CRETACEOUS	1970	PIKES PEAK	G.P. SAND
599	1.64	35.0	30.0	1.053	984	515	CRETACEOUS	1973		SPARKY SAND
842	8.50	33.0	15.0	1.020	978	497	CRETACEOUS	1970		WASECA SAND
1246	4.50	25.0	30.0	1.111	978	478	CRETACEOUS	1971	RUSH LAKE	SPARKY SAND
1149	3.53	25.0	30.0	1.111	977	450	CRETACEOUS	1971		WASECA SAND
0	0.00	0.0	0.0	1.111	978	478	CRETACEOUS	1971		MANNVILLE SANDS (COMMINGLED)
858	4.31	28.0	20.0	1.029	970	737	CRETACEOUS	1985	SALT LAKE	LLOYDMINSTER SAND
1392	4.75	28.0	32.0	1.111	968	787	CRETACEOUS	1980	SENLAC	LLOYDMINSTER SAND
2056	3.78	34.0	20.0	1.053	965	564	CRETACEOUS	1968	SILVERDALE	SPARKY SAND
2056	3.58	34.0	16.0	1.015	968	472	CRETACEOUS	1963	STANDARD HILL	WASECA SAND
421	4.09	30.0	21.0	1.020	959	532	CRETACEOUS	1965	TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)
567	3.20	33.3	18.0	1.020	969	490	CRETACEOUS	1971		G.P. SAND (VOL UNIT NO. 3)
833	3.36	30.6	31.6	1.020	960	532	CRETACEOUS	–		LLOYDMINSTER SD (VOL UNIT NO. 3)
32	2.85	35.0	30.0	1.053	970	443	CRETACEOUS	–		MCLAREN SAND (VOL UNIT NO. 3)
627	3.25	35.0	30.0	1.028	970	511	CRETACEOUS	1969		SPARKY SAND (VOL UNIT NO. 3)
3048	5.30	35.0	22.0	1.020	970	492	CRETACEOUS	–		G.P. SAND (NON-UNIT)
4394	3.80	35.0	25.0	1.020	962	–	CRETACEOUS	–		LLOYDMINSTER SAND (NON-UNIT)
717	3.30	35.0	30.0	1.053	970	443	CRETACEOUS	–		MCLAREN SAND (NON-UNIT)
1665	3.20	35.0	30.0	1.028	969	511	CRETACEOUS	–		SPARKY SAND (NON-UNIT)
0	0.00	0.0	0.0	1.020	964	–	CRETACEOUS	–		MANNVILLE SD (COMMINGLED) (NON-UNIT)
291	4.10	25.0	30.0	1.111	973	359	CRETACEOUS	1978	TANGLEFLAGS EAST	MCLAREN SAND
308	7.50	35.0	30.0	1.020	977	518	CRETACEOUS	1976	TANGLEFLAGS NORTH	CUMMINGS SAND
291	5.40	35.0	30.0	1.053	978	450	CRETACEOUS	1977		G.P. SAND
1069	9.00	35.0	30.0	1.020	970	515	CRETACEOUS	1977		LLOYDMINSTER SAND
130	6.90	35.0	22.0	1.020	979	516	CRETACEOUS	1972	TANGLEFLAGS WEST	G.P. SAND
470	3.90	35.0	25.0	1.020	967	563	CRETACEOUS	1972		LLOYDMINSTER SAND
65	4.10	35.0	30.0	1.053	980	462	CRETACEOUS	1978		MCLAREN SAND
178	4.50	35.0	30.0	1.028	975	498	CRETACEOUS	1972		SPARKY SAND
470	7.40	35.0	30.0	1.053	977	485	CRETACEOUS	1971	WESTHAZEL	G.P.SAND
712	5.20	35.0	30.0	1.111	967	455	CRETACEOUS	1969		SPARKY SAND
259	11.22	25.0	30.0	1.111	980	680	CRETACEOUS	1980	WINTER	CUMMINGS SAND
49	3.00	10.0	40.0	1.053	–	–	DEVONIAN	–	MISCELLANEOUS	BIRDBEAR
907	5.40	35.0	30.0	1.053	–	–	CRETACEOUS	–		COLONY SAND
1165	8.50	35.0	30.0	1.053	–	–	CRETACEOUS	–		CUMMINGS SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
MISCELLANEOUS	DINA SAND	3.023	0.30	0.00	0.30	0.009	0.000	0.009	0.006	0.003	0.654
	G.P. SAND	38.862	1.50	0.00	1.50	0.583	0.000	0.583	0.374	0.209	38.190
	LLOYDMINSTER SAND	23.109	1.00	0.70	1.70	0.231	0.162	0.393	0.291	0.102	18.344
	MANNVILLE SAND	0.402	1.60	0.00	1.60	0.006	0.000	0.006	0.005	0.001	0.573
	MANNVILLE SANDS (COMMINGLED)	15.634	1.60	0.00	1.60	0.250	0.000	0.250	0.165	0.085	13.315
	MCLAREN SAND	21.821	1.20	0.00	1.20	0.262	0.000	0.262	0.154	0.108	17.096
	REX SAND	6.766	0.10	0.00	0.70	0.047	0.000	0.047	0.035	0.012	2.464
	SPARKY SAND	60.755	2.50	0.00	2.50	1.519	0.000	1.519	0.795	0.724	103.229
	WASECA SAND	40.684	2.30	0.00	2.30	0.936	0.000	0.936	0.372	0.564	77.307
	TOTAL AREA I HEAVY	**1394.412**				**54.334**	**11.592**	**65.926**	**42.835**	**23.091**	**2864.960**
AREA II - HEAVY											
ALSASK	BASAL MANNVILLE SAND	0.176	9.70	0.00	9.70	0.017	0.000	0.017	0.012	0.005	0.929
BUFFALO COULEE	BAKKEN SAND	5.082	2.50	8.20	10.70	0.127	0.417	0.544	0.300	0.244	25.200
BUFF. COULEE NORTH	BAKKEN SAND	3.342	2.30	0.00	2.30	0.077	0.000	0.077	0.069	0.008	3.024
CACTUS LAKE	BASAL MANNVILLE-BAKKEN SAND	30.981	10.40	0.00	10.40	3.222	0.000	3.222	1.448	1.774	179.958
COLEVILLE	BAKKEN SAND	50.877	4.60	15.20	19.80	2.340	7.733	10.073	6.920	3.153	202.080
	MANNVILLE SANDS	1.517	5.50	0.00	5.50	0.083	0.000	0.083	0.059	0.024	6.263
COLEVILLE SOUTH	BAKKEN SAND	8.401	4.90	0.00	4.90	0.412	0.000	0.412	0.124	0.288	26.739
	MANNVILLE SANDS	2.066	3.40	0.00	3.40	0.070	0.000	0.070	0.018	0.052	4.968
COSINE LAKE	LLOYDMINSTER SAND	7.487	0.80	0.00	0.80	0.060	0.000	0.060	0.045	0.015	5.044
COURT	BAKKEN SAND	9.751	6.50	0.00	6.50	0.634	0.000	0.634	0.295	0.339	82.082
DRUID	MANNVILLE SANDS	1.972	2.50	0.00	2.50	0.049	0.000	0.049	0.021	0.028	2.344
FUSILIER	BAKKEN SAND	3.530	12.40	0.00	12.40	0.438	0.000	0.438	0.197	0.241	17.142
HEARTS HILL	BAKKEN SAND	3.083	5.00	0.00	5.00	0.154	0.000	0.154	0.052	0.102	14.822
HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)	3.128	4.00	4.30	8.30	0.125	0.135	0.260	0.167	0.093	14.725
	BAKKEN SAND (NON-UNIT)	5.604	5.30	0.00	5.30	0.297	0.000	0.297	0.179	0.118	15.433
LOVERNA	DETRITAL	2.493	4.10	0.00	4.10	0.102	0.000	0.102	0.084	0.018	2.753
LUSELAND	BAKKEN SAND	16.780	3.80	0.00	3.80	0.638	0.000	0.638	0.185	0.453	42.132
NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)	8.498	2.30	12.70	15.00	0.195	1.079	1.274	0.895	0.379	27.688
	BAKKEN SAND (NON-UNIT)	3.206	8.00	0.00	8.00	0.256	0.000	0.256	0.177	0.079	10.259
NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)	4.147	6.00	14.00	20.00	0.249	0.581	0.830	0.624	0.206	25.214
	BASAL MANNVILLE SAND (NON-UNIT)	0.187	1.80	0.00	1.80	0.003	0.000	0.003	0.003	0.000	0.854
NORTH SMILEY	BAKKEN SAND	1.193	5.80	0.00	5.80	0.069	0.000	0.069	0.023	0.046	4.859
PLOVER LAKE	BAKKEN SAND	11.511	3.90	0.00	3.90	0.449	0.000	0.449	0.221	0.228	39.843
MISCELLANEOUS	BAKKEN SAND	20.201	2.40	0.00	2.40	0.485	0.000	0.485	0.177	0.308	34.534
	BASAL MANNVILLE SAND	3.256	1.20	0.00	1.20	0.039	0.000	0.039	0.021	0.018	4.000
	BIRDBEAR	0.138	5.10	0.00	5.10	0.007	0.000	0.007	0.004	0.003	0.700
	DETRITAL	6.467	1.60	0.00	1.60	0.103	0.000	0.103	0.043	0.060	10.751
	LLOYDMINISTER SAND	0.583	1.50	0.00	1.50	0.009	0.000	0.009	0.006	0.003	0.664
	MANNVILLE SAND	17.780	1.40	0.00	1.40	0.249	0.000	0.249	0.116	0.133	22.171
	MCLAREN SAND	0.283	5.70	0.00	5.70	0.016	0.000	0.016	0.008	0.008	1.109
	SPARKY SAND	0.079	13.90	0.00	13.90	0.011	0.000	0.011	0.003	0.008	0.864
	TOTAL AREA II HEAVY	**233.799**				**10.985**	**9.945**	**20.930**	**12.496**	**8.434**	**829.148**
AREA II - LIGHT											
AVON HILL	VIKING (VOL UNIT)	4.493	5.20	2.81	8.01	0.234	0.126	0.360	0.182	0.178	13.172
	VIKING (NON-UNIT)	3.610	7.98	0.00	7.98	0.288	0.000	0.288	0.235	0.053	12.704

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
178	7.30	35.0	30.0	1.053	–	–	CRETACEOUS	–	MISCELLANEOUS	DINA SAND
3237	5.16	35.0	30.0	1.053	–	–	CRETACEOUS	–		G.P. SAND
1910	5.20	35.0	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINSTER SAND
32	5.70	35.0	30.0	1.111	–	–	CRETACEOUS	–		MANNVILLE SAND
890	7.55	35.0	30.0	1.053	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
2233	4.20	35.0	30.0	1.053	–	–	CRETACEOUS	–		MCLAREN SAND
469	6.20	35.0	30.0	1.053	–	–	CRETACEOUS	–		REX SAND
5989	4.36	35.0	30.0	1.053	–	–	CRETACEOUS	–		SPARKY SAND
3318	5.27	35.0	30.0	1.053	–	–	CRETACEOUS	–		WASECA SAND
									AREA II - HEAVY	
49	3.96	26.9	55.0	1.333	953	818	CRETACEOUS	1968	ALSASK	BASAL MANNVILLE SAND
719	3.72	26.6	25.0	1.050	978	823	MISSISSIPPIAN	1952	BUFFALO COULEE	BAKKEN SAND
275	6.10	30.0	31.0	1.039	981	814	MISSISSIPPIAN	1952	BUFF. COULEE NORTH	BAKKEN SAND
2201	7.50	30.0	35.0	1.039	964	851	CRET.-MISS.	1974	CACTUS LAKE	BASAL MANNVILLE-BAKKEN SAND
2873	11.48	24.1	31.0	1.078	982	823	MISSISSIPPIAN	1951	COLEVILLE	BAKKEN SAND
227	3.96	25.0	25.0	1.111	976	765	CRETACEOUS	1952		MANNVILLE SANDS
518	7.88	29.5	25.0	1.075	972	818	MISSISSIPPIAN	1983	COLEVILLE SOUTH	BAKKEN SAND
129	9.49	25.0	25.0	1.111	974	757	CRETACEOUS	1983		MANNVILLE SANDS
871	4.70	29.0	30.0	1.110	965	776	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
647	7.30	28.5	23.0	1.063	953	863	MISSISSIPPIAN	1982	COURT	BAKKEN SAND
178	6.79	25.9	30.0	1.111	969	729	CRETACEOUS	1969	DRUID	MANNVILLE SANDS
247	7.69	25.4	22.0	1.066	962	799	MISSISSIPPIAN	1955	FUSILIER	BAKKEN SAND
291	5.39	27.6	25.0	1.053	953	758	MISSISSIPPIAN	1983	HEARTS HILL	BAKKEN SAND
228	5.88	31.5	22.0	1.053	975	865	MISSISSIPPIAN	1973	HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)
421	7.19	25.3	22.0	1.066	976	–	MISSISSIPPIAN	–		BAKKEN SAND (NON-UNIT)
146	10.50	28.9	25.0	1.333	957	853	CRET.-JURASSIC	1952	LOVERNA	DETRITAL
615	12.20	31.4	25.0	1.053	983	739	MISSISSIPPIAN	1979	LUSELAND	BAKKEN SAND
452	9.40	30.0	30.0	1.050	958	878	MISSISSIPPIAN	1985	NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)
259	7.23	23.4	22.0	1.066	–	–	MISSISSIPPIAN	–		BAKKEN SAND (NON-UNIT)
313	6.80	28.0	27.0	1.049	970	838	CRETACEOUS	1964	NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)
16	5.25	32.0	27.0	1.049	970	838	CRETACEOUS	1964		BASAL MANNVILLE SAND (NON-UNIT)
129	5.28	25.1	25.0	1.075	985	810	MISSISSIPPIAN	1981	NORTH SMILEY	BAKKEN SAND
583	8.80	31.5	25.0	1.053	987	817	MISSISSIPPIAN	1974	PLOVER LAKE	BAKKEN SAND
1457	7.14	27.6	25.0	1.066	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	BAKKEN SAND
323	5.11	27.7	25.0	1.053	–	–	CRETACEOUS	–		BASAL MANNVILLE SAND
49	6.00	10.4	40.0	1.333	975	–	DEVONIAN	–		BIRDBEAR
502	9.10	27.0	30.0	1.335	–	–	CRET.-JURASSIC	–		DETRITAL
65	5.40	25.0	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINISTER SAND
1020	9.50	26.3	25.0	1.075	–	–	CRETACEOUS	–		MANNVILLE SAND
81	3.00	25.9	40.0	1.333	–	–	CRETACEOUS	–		MCLAREN SAND
16	2.00	30.0	15.0	1.033	–	–	CRETACEOUS	–		SPARKY SAND
									AREA II - LIGHT	
1586	2.47	23.0	45.0	1.103	844	725	CRETACEOUS	1959	AVON HILL	VIKING (VOL UNIT)
1328	2.37	23.0	45.0	1.103	844	725	CRETACEOUS	1959		VIKING (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD
			----PER CENT----			----MILLION CUBIC METRES----					1000 m^3
DODSLAND	VIKING SAND (EAGLE LAKE VOL UNIT)	12.724	15.60	8.00	23.60	1.985	1.018	3.003	2.078	0.925	81.674
	VIKING SAND (EAST DODS. VOL UNIT)	24.431	5.00	10.00	15.00	1.222	2.443	3.665	0.834	2.831	33.668
	VIKING SAND (GLENEATH UNIT)	9.546	13.40	16.70	30.10	1.279	1.594	2.873	1.931	0.942	66.201
	VIKING SAND (GLENEATH S. VOL UNIT)	0.396	15.60	7.30	22.90	0.062	0.029	0.091	0.039	0.052	1.922
	VIKING SAND (KIYIU LAKE VOL UNIT)	2.323	6.50	0.00	6.50	0.151	0.000	0.151	0.066	0.085	14.569
	VIKING SAND (NORTH DODS. VOL UNIT)	7.253	4.60	7.50	12.10	0.334	0.544	0.878	0.193	0.685	19.805
	VIKING SAND (NON-UNIT)	52.499	6.50	0.38	6.88	3.412	0.199	3.611	2.486	1.125	211.059
EUREKA	VIKING (NORTH EUREKA UNIT)	6.709	10.00	7.50	17.50	0.671	0.503	1.174	1.081	0.093	14.156
	VIKING (SOUTH EUREKA UNIT)	6.811	9.50	10.80	20.30	0.647	0.736	1.383	1.148	0.235	27.628
	VIKING (NON-UNIT)	6.110	2.72	0.00	2.72	0.166	0.000	0.166	0.113	0.053	14.093
FORGAN	VIKING	1.846	3.50	0.00	3.50	0.065	0.000	0.065	0.047	0.018	7.608
KERROBERT	VIKING	38.424	4.73	0.14	4.87	1.817	0.054	1.871	0.831	1.040	235.984
LUCKY HILLS	VIKING (VOLUNTARY UNIT)	1.573	5.30	0.00	5.30	0.083	0.000	0.083	0.071	0.012	2.715
	VIKING (NON-UNIT)	1.313	6.50	0.00	6.50	0.085	0.000	0.085	0.081	0.004	1.774
PLATO	VIKING (VOL UNIT NO. 1)	6.542	3.80	1.20	5.00	0.249	0.079	0.328	0.279	0.049	6.572
	VIKING (NON-UNIT)	1.999	2.30	0.00	2.30	0.046	0.000	0.046	0.031	0.015	4.899
PLATO NORTH	VIKING	15.409	4.50	0.00	4.50	0.693	0.000	0.693	0.350	0.343	114.498
PRAIRIEDALE	VIKING	1.480	5.80	0.00	5.80	0.086	0.000	0.086	0.025	0.061	10.845
SMILEY-DEWAR	VIKING	25.388	14.86	6.02	20.88	3.773	1.528	5.301	4.308	0.993	91.199
WHITESIDE	VIKING SAND (VOL UNIT)	2.688	10.00	1.50	11.50	0.267	0.040	0.307	0.254	0.053	4.705
	VIKING SAND (NON-UNIT)	4.945	3.28	0.00	3.28	0.162	0.000	0.162	0.116	0.046	21.478
MISCELLANEOUS	VIKING SAND	6.314	3.80	0.00	3.80	0.240	0.000	0.240	0.068	0.172	22.273
	VIKING CHERT	0.158	1.20	0.00	1.20	0.002	0.000	0.002	0.002	0.000	0.000
	TOTAL AREA II LIGHT	**244.964**				**18.019**	**8.893**	**26.912**	**16.849**	**10.063**	**1035.201**
AREA III - MEDIUM											
ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)	0.992	5.00	5.50	10.50	0.050	0.055	0.105	0.072	0.033	2.789
	UPPER SHAUNAVON (NON-UNIT)	0.029	5.20	0.00	5.20	0.002	0.000	0.002	0.002	0.000	0.000
ANTELOPE LAKE EAST	ROSERAY SAND	0.457	1.80	0.00	1.80	0.008	0.000	0.008	0.008	0.000	0.275
BATTLE CREEK	MADISON	0.428	4.05	0.00	4.05	0.017	0.000	0.017	0.017	0.000	0.000
BATTLE CREEK	UPPER SHAUNAVON	0.251	15.10	0.00	15.10	0.038	0.000	0.038	0.031	0.007	1.120
BATTRUM NORTH	ROSERAY SAND	2.743	6.50	0.00	6.50	0.178	0.000	0.178	0.089	0.089	11.716
BATTRUM	ROSERAY SAND (UNIT NO. 1)	29.044	10.00	14.10	24.10	2.904	4.095	6.999	4.907	2.092	140.241
	ROSERAY SAND (UNIT NO. 2)	5.990	6.60	39.70	46.30	0.395	2.378	2.773	1.282	1.491	49.202
	ROSERAY SAND (UNIT NO. 3)	7.254	8.00	17.00	25.00	0.580	1.233	1.813	1.310	0.503	43.445
	ROSERAY SAND (UNIT NO. 4)	3.431	8.30	27.90	36.20	0.285	0.957	1.242	0.976	0.266	52.147
	ROSERAY SAND (NON-UNIT)	1.660	14.10	0.00	14.10	0.234	0.000	0.234	0.064	0.170	13.184
BENCH	UPPER SHAUNAVON	8.893	4.26	0.00	4.26	0.379	0.000	0.379	0.266	0.113	16.907
BEVERLEY	CANTUAR SAND	11.293	5.13	0.00	5.13	0.579	0.000	0.579	0.437	0.142	21.223
BEVERLEY EAST	CANTUAR SAND	1.558	11.42	0.00	11.42	0.178	0.000	0.178	0.041	0.137	16.041
BEVERLEY NORTH	CANTUAR SAND	5.636	5.20	0.00	5.20	0.293	0.000	0.293	0.200	0.093	13.640
BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)	4.036	15.00	28.40	43.40	0.605	1.146	1.751	1.593	0.158	25.236
	UPPER ROSERAY SAND (NON-UNIT)	0.860	13.00	0.00	13.00	0.112	0.000	0.112	0.066	0.046	7.459
BONE CREEK	UPPER SHAUNAVON (UNIT)	12.699	5.00	15.20	20.20	0.635	1.930	2.565	2.339	0.226	32.614
BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)	8.916	5.50	16.50	22.00	0.490	1.471	1.961	0.862	1.099	61.277
	UPPER SHAUNAVON (NON-UNIT)	1.858	5.40	0.00	5.40	0.100	0.000	0.100	0.030	0.070	10.597
CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)	4.814	3.10	2.60	5.70	0.149	0.125	0.274	0.185	0.089	9.946
	CANTUAR SAND (UNIT NO. 2)	0.813	1.70	0.00	1.70	0.014	0.000	0.014	0.012	0.002	0.109
CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)	2.899	6.80	2.30	9.10	0.197	0.067	0.264	0.214	0.050	6.529
	ROSERAY SAND (UNIT NO. 2)	1.989	11.40	1.90	13.30	0.227	0.038	0.265	0.230	0.035	4.221
	ROSERAY SAND (NON-UNIT)	0.014	1.00	0.00	1.00	0.000	0.000	0.000	0.000	0.000	0.014

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
3772	3.02	22.4	45.0	1.103	840	671	CRETACEOUS	1956	DODSLAND	VIKING SAND (EAGLE LAKE VOL UNIT)
6814	3.21	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (EAST DODS. VOL UNIT)
3011	2.93	21.7	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (GLENEATH UNIT)
129	2.75	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (GLENEATH S. VOL UNIT)
842	2.47	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (KIYIU LAKE VOL UNIT)
1910	3.40	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING SAND (NORTH DODS. VOL UNIT)
19263	2.44	22.4	45.0	1.103	842	671	CRETACEOUS	1956		VIKING SAND (NON-UNIT)
1683	3.32	23.0	42.0	1.111	853	724	CRETACEOUS	1954	EUREKA	VIKING (NORTH EUREKA UNIT)
1522	3.69	23.0	42.0	1.100	853	724	CRETACEOUS	1954		VIKING (SOUTH EUREKA UNIT)
1214	4.15	23.0	42.0	1.100	849	724	CRETACEOUS	1954		VIKING (NON-UNIT)
631	2.57	23.0	45.0	1.111	842	714	CRETACEOUS	1981	FORGAN	VIKING
16921	1.98	23.0	45.0	1.103	842	714	CRETACEOUS	1981	KERROBERT	VIKING
453	3.05	23.0	45.0	1.111	843	716	CRETACEOUS	1959	LUCKY HILLS	VIKING (VOLUNTARY UNIT)
421	2.74	23.0	45.0	1.111	843	716	CRETACEOUS	1959		VIKING (NON-UNIT)
1554	3.29	22.0	38.0	1.066	853	644	CRETACEOUS	1968	PLATO	VIKING (VOL UNIT NO. 1)
550	2.84	22.0	38.0	1.066	856	644	CRETACEOUS	1968		VIKING (NON-UNIT)
4354	2.63	23.0	35.0	1.111	865	705	CRETACEOUS	1978	PLATO NORTH	VIKING
583	2.23	23.0	45.0	1.111	870	743	CRETACEOUS	1984	PRAIRIEDALE	VIKING
4743	4.42	24.0	45.0	1.090	875	701	CRETACEOUS	1953	SMILEY-DEWAR	VIKING
1214	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953	WHITESIDE	VIKING SAND (VOL UNIT)
2250	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
2104	2.23	23.0	35.0	1.111	–	–	CRETACEOUS	–	MISCELLANEOUS	VIKING SAND
32	3.51	24.0	35.0	1.111	–	–	CRETACEOUS	–		VIKING CHERT
									AREA III - MEDIUM	
442	2.13	18.0	40.0	1.025	914	1037	JURASSIC	1964	ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)
16	1.83	17.0	40.0	1.025	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
65	5.00	23.9	37.0	1.070	923	950	JURASSIC	1964	ANTELOPE LAKE EAST	ROSERAY SAND
49	7.62	16.0	25.0	1.047	997	1390	MISSISSIPPIAN	1966	BATTLE CREEK	MADISON
85	4.57	12.5	25.0	1.111	945	1337	JURASSIC	1966	BATTLE CREEK	UPPER SHAUNAVON
259	7.58	24.3	41.0	1.026	937	866	JURASSIC	1979	BATTRUM NORTH	ROSERAY SAND
1599	10.73	26.0	33.2	1.026	938	883	JURASSIC	1955	BATTRUM	ROSERAY SAND (UNIT NO. 1)
324	9.75	27.4	29.0	1.026	–	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 2)
842	5.79	25.1	39.3	1.024	–	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 3)
453	5.09	25.1	39.3	1.024	–	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 4)
194	5.88	24.6	39.3	1.026	–	–	JURASSIC	–		ROSERAY SAND (NON-UNIT)
1894	4.29	13.7	15.0	1.064	915	1347	JURASSIC	1969	BENCH	UPPER SHAUNAVON
1214	7.97	23.3	46.1	1.076	920	991	CRETACEOUS	1969	BEVERLEY	CANTUAR SAND
583	1.63	25.2	30.0	1.076	927	975	CRETACEOUS	1985	BEVERLEY EAST	CANTUAR SAND
1154	5.24	24.7	59.4	1.076	932	969	CRETACEOUS	1967	BEVERLEY NORTH	CANTUAR SAND
805	3.11	28.0	38.8	1.063	926	983	JURASSIC	1952	BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)
113	5.42	24.4	38.8	1.063	929	–	JURASSIC	–		UPPER ROSERAY SAND (NON-UNIT)
2226	4.63	13.8	5.0	1.064	914	1341	JURASSIC	1954	BONE CREEK	UPPER SHAUNAVON (UNIT)
2137	2.54	22.8	25.0	1.041	914	1338	JURASSIC	1967	BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)
324	4.35	18.3	25.0	1.041	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
763	5.18	23.3	43.6	1.079	920	965	CRETACEOUS	1956	CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)
146	4.57	23.3	43.6	1.079	929	–	CRETACEOUS	–		CANTUAR SAND (UNIT NO. 2)
716	2.80	26.0	40.0	1.079	933	983	JURASSIC	1952	CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)
502	2.74	26.0	40.0	1.079	938	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 2)
8	1.22	26.0	40.0	1.079	–	–	JURASSIC	–		ROSERAY SAND (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)	13.927	13.70	0.00	13.70	1.908	0.000	1.908	1.614	0.294	43.410
CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)	22.107	8.70	11.50	20.20	1.923	2.542	4.465	3.956	0.509	91.721
	CANTUAR SAND (NON-UNIT)	0.111	5.00	0.00	5.00	0.006	0.000	0.006	0.003	0.003	0.462
CANTUAR NORTH	ROSERAY SAND	1.000	9.30	0.00	9.30	0.093	0.000	0.093	0.058	0.035	6.028
CHAMBERY	UPPER SHAUNAVON	1.739	6.32	0.00	6.32	0.110	0.000	0.110	0.061	0.049	6.527
CLINTONVILLE	SHAUNAVON	4.563	1.80	0.00	1.80	0.082	0.000	0.082	0.061	0.021	2.588
COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)	1.071	14.00	7.00	21.00	0.150	0.075	0.225	0.217	0.008	3.564
	UPPER SHAUNAVON (NON-UNIT)	0.071	2.44	0.00	2.44	0.002	0.000	0.002	0.001	0.001	0.456
COVINGTON WEST	UPPER SHAUNAVON	0.839	10.77	0.00	10.77	0.090	0.000	0.090	0.080	0.010	1.660
DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)	9.383	12.00	13.80	25.80	1.126	1.295	2.421	2.227	0.194	32.616
	UPPER SHAUNAVON (DELTA UNIT NO. 2)	2.540	7.00	10.50	17.50	0.178	0.267	0.445	0.336	0.109	10.488
	UPPER SHAUNAVON (VOL UNIT NO. 3)	0.989	9.60	3.80	13.40	0.095	0.038	0.133	0.082	0.051	3.919
	UPPER SHAUNAVON (NON-UNIT)	0.940	0.64	0.00	0.64	0.006	0.000	0.006	0.006	0.000	0.060
DOLLARD	UPPER SHAUNAVON (UNIT)	26.064	20.00	30.80	50.80	5.213	8.028	13.241	12.777	0.464	110.528
	UPPER SHAUNAVON (E. DOLL. VOL UNIT)	1.648	20.00	23.60	43.60	0.330	0.389	0.719	0.602	0.117	17.830
	UPPER SHAUNAVON (NON-UNIT)	0.774	17.20	0.00	17.20	0.133	0.000	0.133	0.116	0.017	3.370
EASTBROOK	UPPER SHAUNAVON	2.628	4.52	0.00	4.52	0.119	0.000	0.119	0.054	0.065	6.666
EASTEND	SHAUNAVON	5.950	1.37	0.00	1.37	0.082	0.000	0.082	0.073	0.009	3.195
FOSTERTON	ROSERAY SAND (MAIN UNIT)	21.994	17.00	24.70	41.70	3.739	5.433	9.172	8.677	0.495	61.786
	ROSERAY SAND (N.W. UNIT)	1.978	11.00	18.10	29.10	0.218	0.358	0.576	0.554	0.022	6.849
	ROSERAY SAND (W. FOST. VOL UNIT)	1.220	11.00	28.50	39.50	0.134	0.348	0.482	0.456	0.026	7.214
FOSTERTON SOUTH	CANTUAR SAND	0.980	5.70	0.00	5.70	0.056	0.000	0.056	0.039	0.017	3.037
FOSTERTON SOUTH	ROSERAY SAND	0.904	10.20	0.00	10.20	0.092	0.000	0.092	0.027	0.065	6.698
GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)	1.906	4.80	23.90	28.70	0.091	0.456	0.547	0.306	0.241	28.712
	BASAL CANTUAR SAND (JOHNSTON UNIT)	1.030	6.50	8.06	14.56	0.067	0.083	0.150	0.136	0.014	1.534
	BASAL CANTUAR SAND (NON-UNIT)	1.157	3.00	0.00	3.00	0.035	0.000	0.035	0.030	0.005	0.000
GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)	0.614	24.00	16.90	40.90	0.147	0.104	0.251	0.208	0.043	4.276
	UPPER SHAUNAVON (NON-UNIT)	2.879	5.62	0.00	5.62	0.162	0.000	0.162	0.135	0.027	7.631
GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)	6.822	10.00	37.50	47.50	0.682	2.558	3.240	3.052	0.188	39.518
	UPPER SHAUNAVON (NON-UNIT)	0.168	21.40	0.00	21.40	0.036	0.000	0.036	0.034	0.002	1.143
GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)	1.458	12.40	0.00	12.40	0.181	0.000	0.181	0.129	0.052	3.204
	UPPER SHAUNAVON (NON-UNIT)	0.019	5.30	0.00	5.30	0.001	0.000	0.001	0.001	0.000	0.000
HAZLET	ROSERAY SAND (UNIT)	1.742	26.10	4.44	30.54	0.455	0.077	0.532	0.407	0.125	9.127
	ROSERAY SAND (NON-UNIT)	0.253	0.40	0.00	0.40	0.001	0.000	0.001	0.001	0.000	0.168
ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)	3.221	16.60	16.40	33.00	0.535	0.528	1.063	0.954	0.109	16.962
	UPPER SHAUNAVON (NON-UNIT)	1.065	4.05	0.00	4.05	0.043	0.000	0.043	0.018	0.025	5.429
INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)	1.399	17.00	7.90	24.90	0.238	0.111	0.349	0.115	0.234	26.394
	UPPER SHAUNAVON (UNIT)	22.063	9.00	32.60	41.60	1.986	7.193	9.179	7.592	1.587	150.569
	UPPER SHAUNAVON (NON-UNIT)	0.027	7.40	0.00	7.40	0.002	0.000	0.002	0.002	0.000	0.252
JAVA	CANTUAR SAND	0.975	1.80	4.40	6.20	0.018	0.043	0.061	0.041	0.020	3.410
JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)	0.201	18.10	0.00	18.10	0.036	0.000	0.036	0.035	0.001	0.295
LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)	4.936	2.50	2.62	5.12	0.123	0.129	0.252	0.217	0.035	3.934
	SHAUNAVON (NON-UNIT)	2.724	6.50	0.00	6.50	0.177	0.000	0.177	0.113	0.064	14.722
LEON LAKE	SHAUNAVON	6.972	4.83	0.00	4.83	0.337	0.000	0.337	0.282	0.055	10.200
MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)	6.858	13.00	26.00	39.00	0.892	1.783	2.675	2.593	0.082	19.830
NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)	4.017	15.00	28.20	43.20	0.603	1.133	1.736	1.667	0.069	16.631
	ROSERAY SAND (UNIT NO. 4)	4.631	15.00	33.70	48.70	0.695	1.561	2.256	2.151	0.105	31.388
	ROSERAY SAND (NON-UNIT)	0.527	10.90	0.00	10.90	0.057	0.000	0.057	0.035	0.022	4.849
NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)	0.243	9.22	0.00	9.22	0.022	0.000	0.022	0.020	0.002	0.782
	UPPER SHAUNAVON (VOLUNTARY UNIT)	0.942	8.00	7.67	13.67	0.057	0.072	0.129	0.117	0.012	3.414
	UPPER SHAUNAVON (UNIT NO. 4)	2.569	10.00	3.24	13.24	0.257	0.083	0.340	0.291	0.049	8.989
	UPPER SHAUNAVON (NON-UNIT)	0.652	10.90	0.00	10.90	0.071	0.000	0.071	0.053	0.018	3.422
NOTOKEU	UPPER SHAUNAVON	2.541	1.05	0.00	1.05	0.027	0.000	0.027	0.018	0.009	3.232
PENNANT	UPPER SHAUNAVON	1.234	8.49	0.00	8.49	0.105	0.000	0.105	0.083	0.022	4.307

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
2765	2.85	27.2	24.6	1.079	964	991	JURASSIC	1952	CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)
3166	5.06	26.4	43.6	1.079	922	975	CRETACEOUS	1952	CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)
16	5.05	26.4	43.6	1.079	918	–	CRETACEOUS	–		CANTUAR SAND (NON-UNIT)
289	2.84	21.9	40.0	1.079	941	970	CRETACEOUS	1968	CANTUAR NORTH	ROSERAY SAND
583	2.50	17.1	25.0	1.075	926	1505	JURASSIC	1980	CHAMBERY	UPPER SHAUNAVON
518	8.56	14.6	25.0	1.064	915	1362	JURASSIC	1953	CLINTONVILLE	SHAUNAVON
376	2.44	15.5	22.0	1.036	894	1330	JURASSIC	1966	COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)
32	1.40	21.0	22.0	1.036	894	1330	JURASSIC	1966		UPPER SHAUNAVON (NON-UNIT)
259	4.88	11.8	25.0	1.333	906	1336	JURASSIC	1969	COVINGTON WEST	UPPER SHAUNAVON
2159	3.20	20.4	26.5	1.074	914	1065	JURASSIC	1956	DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)
716	3.81	20.0	50.0	1.074	–	–	JURASSIC	–		UPPER SHAUNAVON (DELTA UNIT NO. 2)
129	5.86	23.9	41.2	1.074	914	1065	JURASSIC	–		UPPER SHAUNAVON (VOL UNIT NO. 3)
162	7.12	17.5	50.0	1.074	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
3642	4.42	20.0	12.0	1.087	914	1402	JURASSIC	1953	DOLLARD	UPPER SHAUNAVON (UNIT)
469	3.20	17.2	30.6	1.087	–	–	JURASSIC	–		UPPER SHAUNAVON (E. DOLL. VOL UNIT)
227	3.19	13.2	12.0	1.087	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
421	6.17	14.5	25.0	1.075	926	1420	JURASSIC	1966	EASTBROOK	UPPER SHAUNAVON
971	6.90	12.2	20.0	1.099	927	1457	JURASSIC	1952	EASTEND	SHAUNAVON
1012	9.81	28.8	19.0	1.053	907	975	CRET.-JURASSIC	1952	FOSTERTON	ROSERAY SAND (MAIN UNIT)
104	8.44	28.8	19.0	1.035	933	–	CRET.-JURASSIC	–		ROSERAY SAND (N.W. UNIT)
146	5.03	25.0	30.0	1.053	–	–	CRET.-JURASSIC	–		ROSERAY SAND (W. FOST. VOL UNIT)
81	8.93	22.5	35.0	1.079	947	950	CRETACEOUS	1965	FOSTERTON SOUTH	CANTUAR SAND
65	10.20	20.5	30.0	1.053	933	968	JURASSIC	1965	FOSTERTON SOUTH	ROSERAY SAND
377	2.93	26.5	30.0	1.075	914	1100	CRETACEOUS	1953	GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)
132	6.58	21.1	39.5	1.076	–	–	CRETACEOUS	–		BASAL CANTUAR SAND (JOHNSTON UNIT)
129	6.73	23.7	39.5	1.076	927	–	CRETACEOUS	–		BASAL CANTUAR SAND (NON-UNIT)
453	1.62	16.9	46.5	1.080	914	1195	JURASSIC	1953	GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)
1004	3.53	16.4	46.5	1.080	907	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
1230	3.93	19.4	25.0	1.031	964	1158	JURASSIC	1953	GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)
65	1.88	18.9	25.0	1.031	920	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
779	1.14	24.7	30.0	1.053	891	1325	JURASSIC	1952	GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)
32	0.50	17.5	30.0	1.053	891	1325	JURASSIC	1952		UPPER SHAUNAVON (NON-UNIT)
191	5.27	23.0	21.0	1.050	920	963	JURASSIC	1963	HAZLET	ROSERAY SAND (UNIT)
32	4.57	23.0	21.0	1.050	–	–	JURASSIC	–		ROSERAY SAND (NON-UNIT)
453	6.06	15.9	22.0	1.057	885	1280	JURASSIC	1965	ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)
259	3.62	15.4	22.0	1.057	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
441	3.56	16.6	42.9	1.064	914	1372	JURASSIC	1954	INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)
4244	4.68	13.8	15.0	1.056	914	–	JURASSIC	–		UPPER SHAUNAVON (UNIT)
16	2.44	8.6	15.0	1.056	922	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
347	2.09	24.0	40.0	1.071	947	1013	CRETACEOUS	1955	JAVA	CANTUAR SAND
61	2.44	16.4	15.0	1.031	914	1188	JURASSIC	1953	JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)
971	4.63	15.7	25.6	1.064	914	1371	JURASSIC	1960	LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)
1344	2.30	15.0	37.5	1.064	923	–	JURASSIC	–		SHAUNAVON (NON-UNIT)
1674	3.74	16.2	25.0	1.091	922	1371	JURASSIC	1953	LEON LAKE	SHAUNAVON
770	4.51	26.8	19.9	1.087	914	975	JURASSIC	1952	MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)
364	4.66	32.9	25.0	1.042	968	1006	JURASSIC	1953	NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)
635	4.45	26.7	35.8	1.046	–	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 4)
81	3.60	25.1	25.0	1.042	917	–	JURASSIC	–		ROSERAY SAND (NON-UNIT)
49	4.57	16.1	25.0	1.111	914	1067	JURASSIC	1953	NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)
291	3.36	16.9	40.0	1.053	–	–	JURASSIC	–		UPPER SHAUNAVON (VOLUNTARY UNIT)
809	3.20	19.0	45.0	1.053	–	–	JURASSIC	–		UPPER SHAUNAVON (UNIT NO. 4)
178	3.79	18.5	45.0	1.053	–	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
583	4.58	13.5	25.0	1.064	917	1368	JURASSIC	1969	NOTOKEU	UPPER SHAUNAVON
704	1.83	15.1	25.0	1.053	928	990	JURASSIC	1965	PENNANT	UPPER SHAUNAVON

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
RAPDAN	UPPER SHAUNAVON (UNIT)	16.558	6.10	17.60	23.70	1.010	2.914	3.924	2.670	1.254	103.908
	UPPER SHAUNAVON (N.RAPDAN VOL UNIT)	3.974	3.00	1.80	4.80	0.119	0.072	0.191	0.170	0.021	4.594
	UPPER SHAUNAVON (VOL UNIT NO. 2)	1.111	6.60	11.78	18.38	0.073	0.131	0.204	0.135	0.069	6.890
	UPPER SHAUNAVON (NON-UNIT)	1.260	0.94	0.00	0.94	0.012	0.000	0.012	0.009	0.003	1.160
RAPDAN WEST	SHAUNAVON	5.076	4.20	0.00	4.20	0.213	0.000	0.213	0.160	0.053	10.858
SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)	2.309	11.90	0.00	11.90	0.275	0.000	0.275	0.137	0.138	22.080
	ROSERAY SAND (SUCCESS UNIT)	8.563	13.20	34.80	48.00	1.130	2.980	4.110	3.464	0.646	59.655
SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)	1.440	14.30	29.50	43.80	0.206	0.425	0.631	0.577	0.054	9.032
SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)	2.098	14.00	16.60	30.60	0.294	0.348	0.642	0.181	0.461	40.716
SUFFIELD	ROSERAY SAND (UNIT NO.1)	1.878	15.00	51.30	66.30	0.282	0.963	1.245	1.122	0.123	26.770
	ROSERAY SAND (UNIT NO. 3)	2.780	13.00	35.80	48.80	0.361	0.995	1.356	1.192	0.164	36.836
SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)	3.222	7.00	18.10	25.10	0.226	0.583	0.809	0.643	0.166	21.237
	UPPER SHAUNAVON (UNIT NO. 3)	0.805	10.00	17.50	27.50	0.081	0.141	0.222	0.204	0.018	3.990
	UPPER SHAUNAVON (NON-UNIT)	0.739	5.80	0.00	5.80	0.043	0.000	0.043	0.043	0.000	0.370
VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)	8.349	3.50	24.20	27.70	0.292	2.020	2.312	1.665	0.647	97.268
WHITEMUD	SHAUNAVON	5.378	1.25	0.00	1.25	0.067	0.000	0.067	0.052	0.015	3.069
MISCELLANEOUS	BASAL MANNVILLE SAND	0.334	3.00	0.00	3.00	0.010	0.000	0.010	0.009	0.001	0.000
	CANTUAR SAND	8.480	3.45	0.00	3.45	0.293	0.000	0.293	0.240	0.053	11.153
	GRAVELBOURG	0.124	16.00	0.00	16.00	0.020	0.000	0.020	0.015	0.005	0.802
	PREMIER SAND (N. PREMIER UNIT NO. 2)	0.232	15.00	14.70	29.70	0.035	0.034	0.069	0.061	0.008	1.193
	ROSERAY SAND	9.767	4.02	0.00	4.02	0.393	0.000	0.393	0.299	0.094	15.678
	UPPER ROSERAY	0.289	3.51	0.00	3.51	0.010	0.000	0.010	0.008	0.002	1.141
	LOWER SHAUNAVON	3.199	2.05	0.00	2.05	0.066	0.000	0.066	0.055	0.011	2.211
	UPPER SHAUNAVON	12.870	2.89	0.00	2.89	0.372	0.000	0.372	0.290	0.082	22.826
	TOTAL AREA III MEDIUM	**428.657**				**38.556**	**59.788**	**98.344**	**81.547**	**16.797**	**1898.345**
AREA IV - MEDIUM											
BENSON	MIDALE (NORTHWEST VOL UNIT)	0.513	6.00	3.30	9.30	0.031	0.017	0.048	0.033	0.015	1.378
	MIDALE (UNIT)	8.079	6.00	21.30	27.30	0.485	1.721	2.206	1.567	0.639	52.774
	MIDALE (VOLUNTARY UNIT NO. 1)	2.477	6.00	18.20	24.20	0.149	0.451	0.600	0.381	0.219	12.938
	MIDALE (NON-UNIT)	8.954	6.10	0.00	6.10	0.546	0.000	0.546	0.250	0.296	26.532
BENSON EAST	MIDALE	0.825	1.80	10.70	12.50	0.015	0.088	0.103	0.013	0.090	1.884
BROMHEAD	MIDALE	2.082	14.70	0.00	14.70	0.306	0.000	0.306	0.262	0.044	6.556
BRYANT	FROBISHER	0.341	10.50	0.00	10.50	0.036	0.000	0.036	0.018	0.018	2.633
BRYANT	MIDALE	2.408	3.90	0.00	3.90	0.094	0.000	0.094	0.053	0.041	7.189
ELSWICK	MIDALE	5.402	9.50	21.20	30.70	0.513	1.145	1.658	0.138	1.520	48.551
FLAT LAKE	RATCLIFFE (NON-UNIT)	0.192	7.80	0.00	7.80	0.015	0.000	0.015	0.006	0.009	0.839
FREESTONE	FROBISHER-ALIDA	3.441	23.60	0.00	23.60	0.812	0.000	0.812	0.380	0.432	26.696
GRIFFIN	FROBISHER	0.636	20.30	0.00	20.30	0.129	0.000	0.129	0.129	0.000	1.593
HANDSWORTH	ALIDA	3.761	12.80	0.00	12.80	0.481	0.000	0.481	0.406	0.075	10.229
HARTAVEN	FROBISHER-ALIDA	0.942	28.20	0.00	28.20	0.266	0.000	0.266	0.096	0.170	8.880
HOFFER	RATCLIFFE	1.793	21.80	0.00	21.80	0.391	0.000	0.391	0.253	0.138	1.374
HUME	FROBISHER	1.155	20.30	0.00	20.30	0.234	0.000	0.234	0.196	0.038	6.826
HUME	MIDALE	1.216	16.40	0.00	16.40	0.199	0.000	0.199	0.150	0.049	6.112
HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)	4.118	10.00	9.90	19.90	0.412	0.408	0.820	0.565	0.255	43.255
HUNTOON	FROBISHER	11.039	5.20	0.00	5.20	0.574	0.000	0.574	0.522	0.052	10.417
HUNTOON	MIDALE (VOL. UNIT NO. 1)	4.443	5.00	3.80	8.80	0.222	0.169	0.391	0.303	0.088	5.920
	MIDALE (VOL. UNIT NO. 2)	0.522	1.88	1.86	3.74	0.010	0.010	0.020	0.008	0.012	1.429
	MIDALE (NON-UNIT)	3.147	3.30	0.00	3.30	0.104	0.000	0.104	0.077	0.027	9.641
INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)	9.036	26.00	0.00	26.00	2.349	0.000	2.349	1.595	0.754	32.470
INNES	FROBISHER	10.276	21.60	0.00	21.60	2.220	0.000	2.220	1.850	0.370	39.276
LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)	2.379	17.00	32.80	49.80	0.404	0.780	1.184	0.681	0.503	27.942

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	AVERAGE CONNATE WATER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
3400	5.00	15.0	30.0	1.078	914	1402	JURASSIC	1953	RAPDAN	UPPER SHAUNAVON (UNIT)
497	5.06	17.7	5.0	1.064	–	–	JURASSIC	–		UPPER SHAUNAVON (N.RAPDAN VOL UNIT)
259	4.14	15.6	28.3	1.080	–	–	JURASSIC	–		UPPER SHAUNAVON (VOL UNIT NO. 2)
291	2.94	16.5	5.0	1.064	919	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
1619	2.64	13.3	5.0	1.064	921	1407	JURASSIC	1955	RAPDAN WEST	SHAUNAVON
261	5.66	24.0	30.0	1.075	934	975	JURASSIC	1953	SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)
732	6.07	27.4	23.4	1.069	914	–	JURASSIC	–		ROSERAY SAND (SUCCESS UNIT)
176	4.60	24.8	22.9	1.075	920	975	JURASSIC	1953	SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)
259	5.48	22.7	30.0	1.075	929	966	JURASSIC	1966	SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)
341	3.23	26.0	29.3	1.078	919	1036	JURASSIC	1954	SUFFIELD	ROSERAY SAND (UNIT NO.1)
593	2.99	26.0	35.0	1.078	–	–	JURASSIC	–		ROSERAY SAND (UNIT NO. 3)
699	3.60	17.6	25.0	1.031	914	1097	JURASSIC	1954	SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)
262	2.28	22.8	36.2	1.080	–	–	JURASSIC	–		UPPER SHAUNAVON (UNIT NO. 3)
194	2.67	19.6	25.0	1.031	937	–	JURASSIC	–		UPPER SHAUNAVON (NON-UNIT)
898	5.15	27.5	29.1	1.080	920	963	JURASSIC	1956	VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)
1003	4.08	17.8	20.0	1.083	924	1432	JURASSIC	1953	WHITEMUD	SHAUNAVON
65	4.57	20.0	25.0	1.333	–	–	CRETACEOUS	–	MISCELLANEOUS	BASAL MANNVILLE SAND
1619	3.75	23.1	35.0	1.075	–	–	CRETACEOUS	–		CANTUAR SAND
65	2.29	14.8	25.0	1.333	–	–	JURASSIC	–		GRAVELBOURG
75	1.40	30.8	25.0	1.046	–	–	CRETACEOUS	–		PREMIER SAND (N. PREMIER UNIT NO. 2)
1165	4.48	25.6	25.0	1.026	–	–	JURASSIC	–		ROSERAY SAND
32	4.98	26.0	25.0	1.075	–	–	JURASSIC	–		UPPER ROSERAY
647	4.69	14.8	25.0	1.053	–	–	JURASSIC	–		LOWER SHAUNAVON
3691	2.04	24.5	25.0	1.075	–	–	JURASSIC	–		UPPER SHAUNAVON
									AREA IV - MEDIUM	
243	2.26	15.0	30.0	1.124	875	1371	MISSISSIPPIAN	1956	BENSON	MIDALE (NORTHWEST VOL UNIT)
2978	1.80	24.2	30.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (UNIT)
1117	2.77	15.0	40.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (VOLUNTARY UNIT NO. 1)
1975	6.50	11.2	30.0	1.124	886	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
257	1.70	27.2	22.0	1.124	875	1375	MISSISSIPPIAN	1983	BENSON EAST	MIDALE
518	5.00	13.9	35.0	1.124	903	1693	MISSISSIPPIAN	1965	BROMHEAD	MIDALE
194	4.30	9.1	50.0	1.112	895	1433	MISSISSIPPIAN	1979	BRYANT	FROBISHER
1036	1.60	26.9	46.0	1.125	904	1406	MISSISSIPPIAN	1979	BRYANT	MIDALE
1391	5.30	19.7	54.4	1.226	870	1515	MISSISSIPPIAN	1984	ELSWICK	MIDALE
65	8.60	8.1	49.2	1.199	867	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (NON-UNIT)
875	6.40	12.6	35.0	1.333	879	1180	MISSISSIPPIAN	1953	FREESTONE	FROBISHER-ALIDA
453	2.99	8.4	35.0	1.163	885	1302	MISSISSIPPIAN	1958	GRIFFIN	FROBISHER
1230	6.60	9.5	35.0	1.333	886	1204	MISSISSIPPIAN	1964	HANDSWORTH	ALIDA
226	5.70	13.7	40.0	1.124	876	1199	MISSISSIPPIAN	1965	HARTAVEN	FROBISHER-ALIDA
389	6.20	14.3	35.0	1.250	869	1935	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
518	4.38	8.8	35.0	1.124	883	1350	MISSISSIPPIAN	1967	HUME	FROBISHER
718	2.90	10.1	35.0	1.124	869	1332	MISSISSIPPIAN	1968	HUME	MIDALE
442	10.71	14.0	30.6	1.117	870	1890	MISSISSIPPIAN	1966	HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)
2121	9.00	10.0	35.0	1.124	892	1372	MISSISSIPPIAN	1957	HUNTOON	FROBISHER
1230	3.47	18.0	35.0	1.124	874	1359	MISSISSIPPIAN	1957	HUNTOON	MIDALE (VOL. UNIT NO. 1)
162	5.70	12.7	50.0	1.124	875	1371	MISSISSIPPIAN	1957		MIDALE (VOL. UNIT NO. 2)
1194	5.30	8.6	35.0	1.124	880	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
1327	10.50	10.7	30.0	1.155	876	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)
2043	10.00	9.0	35.0	1.163	891	1333	MISSISSIPPIAN	1965	INNES	FROBISHER
437	4.24	23.5	40.0	1.098	874	1981	MISSISSIPPIAN	1965	LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD $1000\ m^3$
			----PER CENT----			----MILLION CUBIC METRES----					
LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)	9.649	23.30	0.00	23.30	2.248	0.000	2.248	1.975	0.273	38.948
	FROBISHER-ALIDA (NON-UNIT)	6.440	21.30	0.00	21.30	1.372	0.000	1.372	0.869	0.503	34.369
LOUGHEED	MIDALE	20.427	10.20	0.00	10.20	2.084	0.000	2.084	0.692	1.392	84.880
MACOUN	MIDALE	2.064	19.40	0.00	19.40	0.400	0.000	0.400	0.288	0.112	10.870
MACOUN WEST	MIDALE	0.793	11.10	0.00	11.10	0.088	0.000	0.088	0.051	0.037	4.546
MELROSE	FROBISHER-ALIDA	1.298	17.10	0.00	17.10	0.222	0.000	0.222	0.125	0.097	4.509
MIDALE	CENTRAL-FROBISHER	4.679	21.40	0.00	21.40	1.001	0.000	1.001	0.909	0.092	9.693
MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)	1.391	4.40	4.70	9.10	0.061	0.065	0.126	0.051	0.075	2.918
	CENTRAL MIDALE (UNIT)	56.802	16.90	16.70	33.60	9.600	9.486	19.086	15.480	3.606	292.121
	CENTRAL MIDALE (NON-UNIT)	19.549	8.70	0.00	8.70	1.701	0.000	1.701	1.230	0.471	55.593
MINARD	MIDALE	0.879	2.70	0.00	2.70	0.024	0.000	0.024	0.010	0.014	2.043
MOOSE VALLEY	TILSTON	1.111	10.30	0.00	10.30	0.114	0.000	0.114	0.076	0.038	5.845
NEPTUNE	RATCLIFFE	3.857	12.70	0.00	12.70	0.490	0.000	0.490	0.292	0.198	15.745
NORTH HANDSWORTH	ALIDA	2.565	18.40	0.00	18.40	0.472	0.000	0.472	0.331	0.141	12.433
OUNGRE	RATCLIFFE (NON-UNIT)	2.567	10.90	0.00	10.90	0.280	0.000	0.280	0.056	0.224	10.831
RALPH	MIDALE (VOLUNTARY UNIT)	1.041	14.20	5.60	19.80	0.148	0.058	0.206	0.132	0.074	3.996
	MIDALE (NON-UNIT)	0.108	5.50	0.00	5.50	0.006	0.000	0.006	0.004	0.002	0.855
RED JACKET	GRAVELBOURG	0.221	6.30	0.00	6.30	0.014	0.000	0.014	0.005	0.009	1.266
RED JACKET	SHAUNAVON-GRAVELBOURG	2.169	20.10	0.00	20.10	0.436	0.000	0.436	0.090	0.346	31.084
SKINNER LAKE	RATCLIFFE	0.941	6.80	0.00	6.80	0.064	0.000	0.064	0.014	0.050	4.692
STOUGHTON	FROBISHER-ALIDA	1.113	32.90	0.00	32.90	0.366	0.000	0.366	0.328	0.038	4.770
STOUGHTON SOUTH	FROBISHER	1.527	10.00	0.00	10.00	0.153	0.000	0.153	0.115	0.038	4.609
TATAGWA	MIDALE	15.932	4.20	0.00	4.20	0.669	0.000	0.669	0.319	0.350	44.594
TATAGWA NORTH	MIDALE	3.908	1.70	0.00	1.70	0.066	0.000	0.066	0.042	0.024	10.891
VIEWFIELD	FROBISHER (NON-UNIT)	7.592	18.70	0.00	18.70	1.420	0.000	1.420	0.677	0.743	53.210
VIEW HILL	MIDALE	0.537	32.40	0.00	32.40	0.174	0.000	0.174	0.153	0.021	2.189
WAPELLA	WAPELLA SAND	13.763	17.70	0.00	17.70	2.436	0.000	2.436	1.431	1.005	91.608
WEIR HILL	FROBISHER	0.957	5.70	0.00	5.70	0.055	0.000	0.055	0.052	0.003	1.293
WEST INNES	FROBISHER	0.862	19.60	0.00	19.60	0.169	0.000	0.169	0.162	0.007	1.366
WEST KINGSFORD	MIDALE (CULLEN UNIT)	0.882	55.60	0.00	55.60	0.490	0.000	0.490	0.424	0.066	4.510
	MIDALE (NON-UNIT)	2.860	21.70	0.00	21.70	0.621	0.000	0.621	0.533	0.088	8.034
WEYBURN	FROBISHER	9.177	8.30	0.00	8.30	0.762	0.000	0.762	0.499	0.263	28.642
WEYBURN	MIDALE (UNIT)	176.185	13.50	15.60	29.10	23.785	27.485	51.270	42.633	8.637	845.987
	MIDALE (VOLUNTARY UNIT NO. 2)	0.227	8.10	0.00	8.10	0.018	0.000	0.018	0.014	0.004	1.728
	MIDALE (NON-UNIT)	40.288	6.30	0.00	6.30	2.538	0.000	2.538	1.611	0.927	146.880
MISCELLANEOUS	ALIDA	0.506	15.40	0.00	15.40	0.078	0.000	0.078	0.047	0.031	3.510
	BAKKEN	0.121	1.70	0.00	1.70	0.002	0.000	0.002	0.002	0.000	0.026
	BIRDBEAR	0.404	10.90	0.00	10.90	0.044	0.000	0.044	0.018	0.026	4.123
	FROBISHER	6.378	7.70	0.00	7.70	0.491	0.000	0.491	0.284	0.207	33.524
	FROBISHER-ALIDA	1.129	1.30	0.00	1.30	0.015	0.000	0.015	0.013	0.002	0.468
	GRAVELBOURG	0.302	9.90	0.00	9.90	0.030	0.000	0.030	0.006	0.024	3.574
	JURASSIC	3.795	5.20	0.00	5.20	0.197	0.000	0.197	0.129	0.068	10.429
	MIDALE	15.998	7.60	0.00	7.60	1.216	0.000	1.216	0.588	0.628	110.816
	RATCLIFFE	4.201	10.70	0.00	10.70	0.450	0.000	0.450	0.231	0.219	20.929
	SOURIS VALLEY	0.256	5.50	0.00	5.50	0.014	0.000	0.014	0.009	0.005	1.589
	YEOMAN	0.424	7.80	0.00	7.80	0.033	0.000	0.033	0.004	0.029	2.742
	TOTAL AREA IV MEDIUM	**537.052**				**68.114**	**41.383**	**109.997**	**82.936**	**27.061**	**2462.612**

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
583	20.95	15.7	45.0	1.093	848	1174	MISSISSIPPIAN	1963	LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)
855	10.30	13.7	40.0	1.124	897	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
2007	8.00	22.0	35.0	1.124	873	1407	MISSISSIPPIAN	1958	LOUGHEED	MIDALE
905	3.71	11.0	35.0	1.163	895	1531	MISSISSIPPIAN	1969	MACOUN	MIDALE
259	7.44	8.7	45.0	1.163	888	1559	MISSISSIPPIAN	1970	MACOUN WEST	MIDALE
288	6.53	14.1	45.0	1.124	878	1169	MISSISSIPPIAN	1963	MELROSE	FROBISHER-ALIDA
1362	7.80	9.9	50.0	1.124	881	1411	MISSISSIPPIAN	1953	MIDALE	CENTRAL-FROBISHER
259	7.03	14.7	41.6	1.124	883	1340	MISSISSIPPIAN	1953	MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)
12335	5.24	16.3	39.4	1.124	877	1402	MISSISSIPPIAN	1953		CENTRAL MIDALE (UNIT)
4795	4.00	17.9	36.0	1.124	883	–	MISSISSIPPIAN	–		CENTRAL MIDALE (NON-UNIT)
259	2.93	26.0	45.0	1.234	905	1340	MISSISSIPPIAN	1956	MINARD	MIDALE
194	7.80	13.6	40.0	1.111	909	1163	MISSISSIPPIAN	1958	MOOSE VALLEY	TILSTON
1004	4.85	16.0	45.0	1.111	910	1784	MISSISSIPPIAN	1967	NEPTUNE	RATCLIFFE
785	6.70	10.0	35.0	1.333	885	1176	MISSISSIPPIAN	1965	NORTH HANDSWORTH	ALIDA
1068	2.80	19.2	45.0	1.230	878	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (NON-UNIT)
680	3.90	10.0	55.9	1.124	863	1315	MISSISSIPPIAN	1973	RALPH	MIDALE (VOLUNTARY UNIT)
65	3.85	11.0	55.9	1.124	863	1315	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
32	3.60	31.0	38.0	1.003	930	735	JURASSIC	1985	RED JACKET	GRAVELBOURG
194	6.50	27.6	37.5	1.003	948	665	JURASSIC	1984	RED JACKET	SHAUNAVON-GRAVELBOURG
259	3.67	20.0	45.0	1.111	893	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
473	4.30	9.8	35.0	1.164	882	1268	MISSISSIPPIAN	1960	STOUGHTON	FROBISHER-ALIDA
518	8.20	7.6	45.0	1.163	892	1265	MISSISSIPPIAN	1974	STOUGHTON SOUTH	FROBISHER
1311	9.80	20.7	35.0	1.085	904	1478	MISSISSIPPIAN	1977	TATAGWA	MIDALE
453	8.40	16.5	25.0	1.205	900	1470	MISSISSIPPIAN	1983	TATAGWA NORTH	MIDALE
1061	12.80	11.0	35.0	1.279	872	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (NON-UNIT)
194	5.61	11.1	50.0	1.124	885	1539	MISSISSIPPIAN	1959	VIEW HILL	MIDALE
1182	6.00	28.0	30.0	1.010	906	701	CRET.-JURASSIC	1952	WAPELLA	WAPELLA SAND
178	10.21	10.8	35.0	1.333	871	1353	MISSISSIPPIAN	1968	WEIR HILL	FROBISHER
291	5.30	10.0	35.0	1.163	893	1335	MISSISSIPPIAN	1965	WEST INNES	FROBISHER
291	5.36	10.4	35.0	1.196	895	1485	MISSISSIPPIAN	1955	WEST KINGSFORD	MIDALE (CULLEN UNIT)
831	5.50	11.6	35.0	1.205	882	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
1877	7.10	12.9	40.0	1.124	876	1417	MISSISSIPPIAN	1954	WEYBURN	FROBISHER
21529	7.83	17.2	31.7	1.124	880	1399	MISSISSIPPIAN	1954	WEYBURN	MIDALE (UNIT)
100	3.60	12.8	44.0	1.135	880	1405	MISSISSIPPIAN	–		MIDALE (VOLUNTARY UNIT NO. 2)
8856	5.80	17.0	31.0	1.124	877	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
128	6.75	12.0	35.0	1.333	880	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
64	2.50	10.7	25.0	1.064	–	–	MISSISSIPPIAN	–		BAKKEN
131	3.50	13.8	25.0	1.176	–	–	DEVONIAN	–		BIRDBEAR
2783	5.60	9.2	50.0	1.124	885	–	MISSISSIPPIAN	–		FROBISHER
388	4.70	12.7	35.0	1.333	874	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
64	3.00	28.0	25.0	1.333	–	–	JURASSIC	–		GRAVELBOURG
324	6.50	26.0	30.0	1.010	897	–	JURASSIC	–		JURASSIC
2464	8.90	16.4	50.0	1.124	885	–	MISSISSIPPIAN	–		MIDALE
1036	5.40	15.4	35.0	1.333	869	–	MISSISSIPPIAN	–		RATCLIFFE
64	7.40	10.0	40.0	1.111	–	–	MISSISSIPPIAN	–		SOURIS VALLEY
64	9.70	11.5	40.0	1.010	–	–	ORDOVICIAN	–		YEOMAN

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
AREA IV - LIGHT											
ALAMEDA	MIDALE (CENTRAL UNIT)	1.148	11.70	29.50	41.20	0.134	0.339	0.473	0.389	0.084	6.834
	MIDALE (EAST UNIT)	4.901	16.00	21.50	37.50	0.784	1.054	1.838	1.520	0.318	24.829
	MIDALE (NORTH UNIT)	0.989	12.00	16.80	28.80	0.119	0.166	0.285	0.257	0.028	3.198
	MIDALE (SOUTH UNIT)	1.818	13.30	12.80	26.10	0.242	0.233	0.475	0.418	0.057	6.143
	MIDALE (NON-UNIT)	3.468	8.00	0.00	8.00	0.277	0.000	0.277	0.207	0.070	20.419
ALAMEDA WEST	FROBISHER	0.151	0.20	0.00	0.20	0.000	0.000	0.000	0.000	0.000	0.000
ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO.1)	0.767	8.00	7.70	15.70	0.061	0.059	0.120	0.033	0.087	4.419
	MIDALE (NON-UNIT)	0.122	1.50	0.00	1.50	0.002	0.000	0.002	0.002	0.000	0.265
ALIDA EAST	FROBISHER-ALIDA (UNIT)	11.222	26.60	0.00	26.60	2.985	0.000	2.985	1.910	1.075	78.885
	FROBISHER-ALIDA (NON-UNIT)	0.418	9.00	0.00	9.00	0.038	0.000	0.038	0.034	0.004	0.968
ALIDA NORTH	ALIDA	1.053	21.00	0.00	21.00	0.221	0.000	0.221	0.120	0.101	7.015
ALIDA WEST	FROBISHER-ALIDA	7.239	31.00	0.00	31.00	2.244	0.000	2.244	1.830	0.414	38.372
ARCOLA	FROBISHER-ALIDA	5.207	30.00	0.00	30.00	1.562	0.000	1.562	1.027	0.535	57.040
AUBURNTON	FROBISHER-ALIDA	0.261	4.20	0.00	4.20	0.011	0.000	0.011	0.008	0.003	1.957
BIENFAIT	MIDALE BEDS	2.929	18.20	0.00	18.20	0.533	0.000	0.533	0.215	0.318	31.754
BROWNING	FROBISHER-ALIDA	5.126	22.00	0.00	22.00	1.128	0.000	1.128	0.873	0.255	24.947
CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)	0.185	43.00	0.00	43.00	0.080	0.000	0.080	0.053	0.027	2.019
	FROBISHER-ALIDA (NON-UNIT)	4.780	7.60	0.00	7.60	0.363	0.000	0.363	0.215	0.148	46.985
CANTAL SOUTH	FROBISHER-ALIDA	3.411	22.80	0.00	22.80	0.778	0.000	0.778	0.723	0.055	9.470
CARNDUFF	FROBISHER	4.359	14.60	0.00	14.60	0.636	0.000	0.636	0.536	0.100	9.691
CARNDUFF	MIDALE (EAST UNIT)	8.421	15.00	23.30	38.30	1.263	1.962	3.225	2.719	0.506	31.360
	MIDALE (SOUTH VOL UNIT)	1.089	10.00	2.20	12.20	0.109	0.024	0.133	0.082	0.051	7.643
	MIDALE (WEST UNIT)	3.421	13.00	30.40	43.40	0.445	1.040	1.485	1.426	0.059	10.258
	MIDALE (VOLUNTARY UNIT NO. 1)	0.433	14.20	17.20	31.40	0.061	0.074	0.135	0.059	0.076	6.409
	MIDALE (NON-UNIT)	2.270	7.50	3.10	10.60	0.170	0.070	0.240	0.164	0.076	9.663
CLARILAW	FROBISHER-ALIDA	0.599	24.50	0.00	24.50	0.147	0.000	0.147	0.106	0.041	5.467
CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)	0.621	33.50	0.00	33.50	0.208	0.000	0.208	0.117	0.091	10.573
	FROBISHER-ALIDA (NON-UNIT)	0.168	17.30	0.00	17.30	0.029	0.000	0.029	0.010	0.019	3.012
CRYSTAL HILL	SOURIS VALLEY	1.063	7.40	0.00	7.40	0.079	0.000	0.079	0.071	0.008	1.791
DALESBORO	FROBISHER-ALIDA	0.099	32.30	0.00	32.30	0.032	0.000	0.032	0.028	0.004	0.564
EDENVALE	TILSTON	2.446	4.00	0.00	4.00	0.098	0.000	0.098	0.076	0.022	3.798
ELMORE	FROBISHER (VOLUNTARY UNIT)	5.019	28.00	12.90	40.90	1.405	0.647	2.052	1.751	0.301	32.106
	FROBISHER (NON-UNIT)	0.768	6.00	0.00	6.00	0.046	0.000	0.046	0.027	0.019	2.382
ELMORE	MIDALE	0.291	26.00	0.00	26.00	0.076	0.000	0.076	0.066	0.010	1.062
FERTILE	TILSTON	0.267	4.50	0.00	4.50	0.012	0.000	0.012	0.011	0.001	1.306
FERTILE	TILSTON-SOURIS VALLEY	0.183	6.60	0.00	6.60	0.012	0.000	0.012	0.009	0.003	0.602
FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	8.114	10.00	15.00	25.00	0.811	1.217	2.028	1.612	0.416	54.346
	RATCLIFFE (NON-UNIT)	1.341	2.90	0.00	2.90	0.039	0.000	0.039	0.014	0.025	3.409
FLORENCE	FROBISHER	1.075	10.80	0.00	10.80	0.116	0.000	0.116	0.112	0.004	1.633
FREDA LAKE	RATCLIFFE	7.996	14.00	0.00	14.00	1.119	0.000	1.119	0.575	0.544	51.585
FRYS	TILSTON-SOURIS VALLEY	2.595	5.70	0.00	5.70	0.148	0.000	0.148	0.113	0.035	5.574
FRYS EAST	TILSTON-SOURIS VALLEY	0.698	4.60	0.00	4.60	0.032	0.000	0.032	0.024	0.008	5.065
GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)	1.090	10.00	4.50	14.50	0.109	0.049	0.158	0.134	0.024	2.731
	FROBISHER-ALIDA (NON-UNIT)	2.885	7.20	0.00	7.20	0.208	0.000	0.208	0.131	0.077	9.024
GLEN EWEN	FROBISHER	1.520	13.80	0.00	13.80	0.210	0.000	0.210	0.142	0.068	6.084
GLEN EWEN	MIDALE (UNIT)	5.905	13.00	6.60	19.60	0.768	0.390	1.158	1.020	0.138	15.462
	MIDALE (NON-UNIT)	0.478	2.10	0.00	2.10	0.010	0.000	0.010	0.005	0.005	1.234
HASTINGS	FROBISHER (UNIT)	2.373	28.60	2.00	30.60	0.679	0.047	0.726	0.693	0.033	6.719
	FROBISHER (VOL UNIT NO. 1)	4.724	17.00	11.60	28.60	0.803	0.548	1.351	1.084	0.267	18.561
	FROBISHER (VOL UNIT NO. 2)	5.705	11.00	2.90	13.90	0.628	0.165	0.793	0.776	0.017	4.803
	FROBISHER (NON-UNIT)	14.496	13.60	0.00	13.60	1.971	0.000	1.971	1.773	0.198	43.800
HASTINGS EAST	FROBISHER	3.238	9.70	0.00	9.70	0.314	0.000	0.314	0.187	0.127	18.956

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
									AREA IV - LIGHT	
680	2.50	16.3	43.0	1.376	823	1347	MISSISSIPPIAN	1956	ALAMEDA	MIDALE (CENTRAL UNIT)
2363	2.80	17.2	41.0	1.370	826	–	MISSISSIPPIAN	–		MIDALE (EAST UNIT)
421	3.40	16.6	43.0	1.370	–	–	MISSISSIPPIAN	–		MIDALE (NORTH UNIT)
906	3.40	14.5	45.0	1.351	–	–	MISSISSIPPIAN	–		MIDALE (SOUTH UNIT)
1732	4.30	11.0	42.0	1.370	842	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
32	11.00	8.8	35.0	1.333	844	1381	MISSISSIPPIAN	1982	ALAMEDA WEST	FROBISHER
181	8.90	11.7	45.0	1.351	843	1356	MISSISSIPPIAN	–	ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO.1)
32	8.00	11.7	45.0	1.351	–	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
1619	8.00	16.5	30.0	1.333	824	1122	MISSISSIPPIAN	1954	ALIDA EAST	FROBISHER-ALIDA (UNIT)
65	7.90	16.7	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
128	9.00	17.4	30.0	1.333	836	1143	MISSISSIPPIAN	1962	ALIDA NORTH	ALIDA
957	10.10	14.1	31.0	1.299	836	1143	MISSISSIPPIAN	1955	ALIDA WEST	FROBISHER-ALIDA
906	7.10	16.6	35.0	1.333	854	1199	MISSISSIPPIAN	1964	ARCOLA	FROBISHER-ALIDA
80	5.10	13.1	35.0	1.333	832	1197	MISSISSIPPIAN	1985	AUBURNTON	FROBISHER-ALIDA
560	11.40	8.3	35.0	1.176	852	1589	MISSISSIPPIAN	1980	BIENFAIT	MIDALE BEDS
1123	7.20	13.0	35.0	1.333	853	1280	MISSISSIPPIAN	1957	BROWNING	FROBISHER-ALIDA
97	5.90	6.9	35.0	1.389	823	1196	MISSISSIPPIAN	1956	CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)
728	9.90	13.6	35.0	1.333	834	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
696	15.00	6.7	35.0	1.333	828	1135	MISSISSIPPIAN	1956	CANTAL SOUTH	FROBISHER-ALIDA
849	7.80	13.5	35.0	1.333	854	1298	MISSISSIPPIAN	1956	CARNDUFF	FROBISHER
5568	2.00	14.4	30.0	1.333	844	1280	MISSISSIPPIAN	1955	CARNDUFF	MIDALE (EAST UNIT)
680	2.50	12.2	30.0	1.333	839	–	MISSISSIPPIAN	–		MIDALE (SOUTH VOL UNIT)
2104	2.40	12.9	30.0	1.333	844	–	MISSISSIPPIAN	–		MIDALE (WEST UNIT)
223	2.70	13.7	30.0	1.333	–	–	MISSISSIPPIAN	–		MIDALE (VOLUNTARY UNIT NO. 1)
663	5.90	11.9	35.0	1.333	835	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
244	4.30	11.7	35.0	1.333	858	1231	MISSISSIPPIAN	1963	CLARILAW	FROBISHER-ALIDA
194	5.40	11.4	35.0	1.250	843	1234	MISSISSIPPIAN	1963	CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)
65	6.00	8.3	35.0	1.250	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
388	5.90	8.6	40.0	1.111	861	1113	MISSISSIPPIAN	1966	CRYSTAL HILL	SOURIS VALLEY
32	5.40	11.8	35.0	1.333	853	1262	MISSISSIPPIAN	1966	DALESBORO	FROBISHER-ALIDA
453	8.00	12.5	40.0	1.111	853	1126	MISSISSIPPIAN	1963	EDENVALE	TILSTON
874	7.00	15.9	40.0	1.163	871	1219	MISSISSIPPIAN	1961	ELMORE	FROBISHER (VOLUNTARY UNIT)
292	6.70	8.3	45.0	1.163	875	–	MISSISSIPPIAN	–		FROBISHER (NON-UNIT)
194	2.70	11.4	35.0	1.333	841	1204	MISSISSIPPIAN	1961	ELMORE	MIDALE
49	6.90	14.6	40.0	1.111	860	953	MISSISSIPPIAN	1983	FERTILE	TILSTON
32	9.20	11.5	40.0	1.111	860	953	MISSISSIPPIAN	1956	FERTILE	TILSTON-SOURIS VALLEY
2428	5.60	14.1	49.0	1.205	865	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
324	7.30	10.9	35.0	1.250	848	–	MISSISSIPPIAN	–		RATCLIFFE (NON-UNIT)
292	6.40	11.8	35.0	1.333	843	1290	MISSISSIPPIAN	1965	FLORENCE	FROBISHER
2249	2.90	22.7	40.0	1.111	870	1694	MISSISSIPPIAN	1967	FREDA LAKE	RATCLIFFE
291	12.70	13.0	40.0	1.111	846	974	MISSISSIPPIAN	1958	FRYS	TILSTON-SOURIS VALLEY
130	7.10	14.0	40.0	1.111	846	974	MISSISSIPPIAN	1984	FRYS EAST	TILSTON-SOURIS VALLEY
243	6.40	11.5	30.0	1.149	858	1072	MISSISSIPPIAN	1956	GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)
550	7.00	12.3	30.0	1.149	865	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
551	5.60	10.1	35.0	1.333	818	1304	MISSISSIPPIAN	1954	GLEN EWEN	FROBISHER
4209	2.10	13.7	35.0	1.333	828	1280	MISSISSIPPIAN	1954	GLEN EWEN	MIDALE (UNIT)
146	4.80	14.0	35.0	1.333	826	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
502	6.50	14.8	37.0	1.282	833	1200	MISSISSIPPIAN	1955	HASTINGS	FROBISHER (UNIT)
1105	6.40	13.7	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER (VOL UNIT NO. 1)
971	6.10	19.8	37.0	1.282	843	–	MISSISSIPPIAN	–		FROBISHER (VOL UNIT NO. 2)
2686	10.90	11.0	40.0	1.333	842	–	MISSISSIPPIAN	–		FROBISHER (NON-UNIT)
891	9.20	8.1	35.0	1.333	837	1147	MISSISSIPPIAN	1956	HASTINGS EAST	FROBISHER

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
HAZELWOOD	TILSTON	1.632	14.70	0.00	14.70	0.240	0.000	0.240	0.176	0.064	11.145
HOFFER	RATCLIFFE	2.382	10.70	0.00	10.70	0.255	0.000	0.255	0.173	0.082	12.179
HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)	1.174	41.50	0.00	41.50	0.487	0.000	0.487	0.448	0.039	6.329
INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)	8.365	31.10	0.00	31.10	2.602	0.000	2.602	2.232	0.370	26.960
	FROBISHER-ALIDA (NON-UNIT)	4.319	7.10	0.00	7.10	0.307	0.000	0.307	0.096	0.211	18.535
INGOLDSBY WEST	FROBISHER-ALIDA	0.788	10.50	0.00	10.50	0.083	0.000	0.083	0.013	0.070	7.497
KENOSEE	TILSTON (VOLUNTARY UNIT)	4.060	60.00	0.00	60.00	2.436	0.000	2.436	1.932	0.504	46.148
KISBEY	BIRDBEAR	1.350	17.50	0.00	17.50	0.236	0.000	0.236	0.150	0.086	13.021
LIGHTNING	TILSTON	0.646	7.70	0.00	7.70	0.050	0.000	0.050	0.047	0.003	2.038
MOOSE MOUNTAIN	TILSTON	4.394	19.60	0.00	19.60	0.861	0.000	0.861	0.552	0.309	40.865
MORRISVIEW	FROBISHER-ALIDA	0.617	32.00	0.00	32.00	0.197	0.000	0.197	0.177	0.020	5.066
NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)	0.762	8.00	5.00	13.00	0.061	0.038	0.099	0.098	0.001	0.817
NORTHGATE	FROBISHER	0.278	15.50	0.00	15.50	0.043	0.000	0.043	0.042	0.001	0.295
NORTHGATE	MIDALE (VOLUNTARY UNIT)	3.190	8.70	0.50	9.20	0.278	0.016	0.294	0.257	0.037	5.386
	MIDALE (NON UNIT)	0.036	22.00	0.00	22.00	0.008	0.000	0.008	0.006	0.002	0.621
NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)	9.382	21.00	0.00	21.00	1.970	0.000	1.970	1.483	0.487	27.383
	ALIDA (NON-UNIT)	3.702	25.50	0.00	25.50	0.944	0.000	0.944	0.823	0.121	14.231
OAKLEY	FROBISHER	0.577	21.30	0.00	21.30	0.123	0.000	0.123	0.109	0.014	2.091
OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	14.426	8.00	7.00	15.00	1.154	1.010	2.164	1.149	1.015	46.387
	RATCLIFFE (NON-UNIT)	1.077	14.00	0.00	14.00	0.151	0.000	0.151	0.072	0.079	6.983
PARKMAN	SOURIS VALLEY	3.317	6.50	0.00	6.50	0.216	0.000	0.216	0.172	0.044	11.093
PARKMAN	TILSTON	2.192	13.00	0.00	13.00	0.285	0.000	0.285	0.150	0.135	19.506
PARKMAN	TILSTON-SOURIS VALLEY	31.193	15.00	0.00	15.00	4.679	0.000	4.679	3.340	1.339	141.270
PARKMAN SOUTH	TILSTON-SOURIS VALLEY	2.080	8.50	0.00	8.50	0.177	0.000	0.177	0.118	0.059	5.200
PINTO	FROBISHER	1.445	30.50	0.00	30.50	0.441	0.000	0.441	0.407	0.034	10.762
PINTO	MIDALE (SOUTH PINTO UNIT)	5.030	10.40	4.50	14.90	0.523	0.226	0.749	0.600	0.149	8.617
	MIDALE (NON-UNIT)	11.646	6.90	0.00	6.90	0.804	0.000	0.804	0.562	0.242	40.336
QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)	2.322	46.00	0.00	46.00	1.068	0.000	1.068	0.947	0.121	16.981
	FROBISHER-ALIDA (NON-UNIT)	14.522	48.00	0.00	48.00	6.971	0.000	6.971	4.546	2.425	191.772
QUEENSDALE NORTH	ALIDA	1.576	21.00	0.00	21.00	0.331	0.000	0.331	0.234	0.097	12.442
QUEENSDALE WEST	ALIDA	2.299	36.50	0.00	36.50	0.839	0.000	0.839	0.722	0.117	11.266
ROCANVILLE	BAKKEN SAND	2.379	17.50	0.00	17.50	0.416	0.000	0.416	0.308	0.108	11.270
RONCOTT	BAKKEN SAND	1.037	10.00	0.00	10.00	0.104	0.000	0.104	0.101	0.003	1.578
ROSEBANK	ALIDA (VOL UNIT NO. 1)	8.732	45.20	0.00	45.20	3.947	0.000	3.947	3.552	0.395	30.229
	ALIDA (NON-UNIT)	9.823	14.00	0.00	14.00	1.375	0.000	1.375	1.037	0.338	33.375
ROSEBANK SOUTH	ALIDA	1.459	16.00	0.00	16.00	0.233	0.000	0.233	0.137	0.096	11.132
SHERWOOD	FROBISHER	4.295	46.00	0.00	46.00	1.976	0.000	1.976	1.700	0.276	28.336
SILVERTON	FROBISHER	0.793	10.50	0.00	10.50	0.083	0.000	0.083	0.078	0.005	1.561
SKINNER LAKE	RATCLIFFE	3.765	16.00	0.00	16.00	0.602	0.000	0.602	0.263	0.339	17.263
SOURIS FLAT	FROBISHER	2.564	27.50	0.00	27.50	0.705	0.000	0.705	0.591	0.114	13.870
SOUTH FLETWODE	TILSTON	1.578	34.50	0.00	34.50	0.544	0.000	0.544	0.444	0.100	13.976
STAR VALLEY	FROBISHER-ALIDA	4.917	47.50	0.00	47.50	2.336	0.000	2.336	1.357	0.979	72.731
STEELMAN	FROBISHER (VOL UNIT NO. 1)	0.910	30.50	0.00	30.50	0.278	0.000	0.278	0.259	0.019	3.132
	FROBISHER (DOUGLASTON UNIT)	0.850	26.50	0.00	26.50	0.225	0.000	0.225	0.204	0.021	2.866
	FROBISHER (NON-UNIT)	15.264	12.40	0.00	12.40	1.893	0.000	1.893	1.655	0.238	51.806

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
227	11.00	12.1	40.0	1.111	848	1149	MISSISSIPPIAN	1963	HAZELWOOD	TILSTON
631	6.60	11.0	35.0	1.250	878	1931	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
209	9.10	10.3	28.7	1.190	830	2326	DEVONIAN	1966	HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)
1214	8.70	13.0	30.0	1.149	865	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)
728	9.10	10.7	30.0	1.149	850	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
113	11.30	9.8	30.0	1.111	850	–	MISSISSIPPIAN	1986	INGOLDSBY WEST	FROBISHER-ALIDA
996	4.90	16.0	35.0	1.250	848	1196	MISSISSIPPIAN	1958	KENOSEE	TILSTON (VOLUNTARY UNIT)
210	8.50	12.0	25.0	1.190	845	1626	DEVONIAN	1968	KISBEY	BIRDBEAR
194	4.50	13.7	40.0	1.111	843	1058	MISSISSIPPIAN	1957	LIGHTNING	TILSTON
566	10.70	13.0	40.0	1.075	864	1188	MISSISSIPPIAN	1[illegible]0	MOOSE MOUNTAIN	TILSTON
194	4.50	13.6	35.0	1.250	843	1266	MISSISSIPPIAN	1967	MORRISVIEW	FROBISHER-ALIDA
233	5.50	12.2	35.0	1.333	827	1152	MISSISSIPPIAN	1965	NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)
162	6.90	5.1	35.0	1.333	843	1585	MISSISSIPPIAN	1963	NORTHGATE	FROBISHER
1456	4.80	15.6	55.0	1.538	836	1575	MISSISSIPPIAN	–	NORTHGATE	MIDALE (VOLUNTARY UNIT)
16	3.80	14.3	45.0	1.333	837	–	MISSISSIPPIAN	1963		MIDALE (NON UNIT)
1182	9.10	16.9	31.2	1.333	839	1066	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)
712	6.50	15.5	31.2	1.333	846	–	MISSISSIPPIAN	–		ALIDA (NON-UNIT)
210	5.60	10.9	40.0	1.333	841	1196	MISSISSIPPIAN	1955	OAKLEY	FROBISHER
2784	6.50	17.9	45.0	1.235	878	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
259	5.10	18.3	45.0	1.235	878	–	MISSISSIPPIAN	–		RATCLIFFE (NON-UNIT)
679	11.80	9.2	50.0	1.111	871	1188	MISSISSIPPIAN	1964	PARKMAN	SOURIS VALLEY
275	12.20	12.1	40.0	1.111	870	1060	MISSISSIPPIAN	1958	PARKMAN	TILSTON
3107	16.90	11.0	40.0	1.111	862	1097	MISSISSIPPIAN	1959	PARKMAN	TILSTON-SOURIS VALLEY
210	13.10	14.0	40.0	1.111	841	1096	MISSISSIPPIAN	1969	PARKMAN SOUTH	TILSTON-SOURIS VALLEY
793	4.60	9.6	45.0	1.333	848	1631	MISSISSIPPIAN	1957	PINTO	FROBISHER
2525	4.40	12.9	45.0	1.567	873	1615	MISSISSIPPIAN	1957	PINTO	MIDALE (SOUTH PINTO UNIT)
3543	6.30	10.7	35.0	1.333	834	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
437	10.80	8.9	35.0	1.176	843	1173	MISSISSIPPIAN	1956	QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)
2476	8.10	13.1	35.0	1.176	850	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
275	7.30	16.1	35.0	1.333	851	1174	MISSISSIPPIAN	1959	QUEENSDALE NORTH	ALIDA
421	10.00	11.2	35.0	1.333	859	1204	MISSISSIPPIAN	1956	QUEENSDALE WEST	ALIDA
267	8.70	21.0	35.0	1.333	843	715	MISSISSIPPIAN	1957	ROCANVILLE	BAKKEN SAND
227	4.50	14.4	25.0	1.064	823	1822	MISSISSIPPIAN	1956	RONCOTT	BAKKEN SAND
971	13.70	12.5	30.0	1.333	828	1067	MISSISSIPPIAN	1955	ROSEBANK	ALIDA (VOL UNIT NO. 1)
971	15.00	14.2	37.5	1.316	841	–	MISSISSIPPIAN	–		ALIDA (NON-UNIT)
356	7.60	10.5	35.0	1.266	864	1074	MISSISSIPPIAN	1954	ROSEBANK SOUTH	ALIDA
405	11.50	16.5	35.0	1.163	880	1240	MISSISSIPPIAN	1963	SHERWOOD	FROBISHER
194	15.40	5.9	40.0	1.333	854	1204	MISSISSIPPIAN	1956	SILVERTON	FROBISHER
907	4.30	19.5	45.0	1.111	864	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
648	6.10	13.3	35.0	1.333	861	1334	MISSISSIPPIAN	1965	SOURIS FLAT	FROBISHER
324	7.10	12.7	40.0	1.111	859	1143	MISSISSIPPIAN	1961	SOUTH FLETWODE	TILSTON
744	9.10	13.8	35.0	1.235	862	1162	MISSISSIPPIAN	1960	STAR VALLEY	FROBISHER-ALIDA
363	5.90	9.2	35.0	1.408	833	1409	MISSISSIPPIAN	1954	STEELMAN	FROBISHER (VOL UNIT NO. 1)
227	7.60	10.1	35.0	1.333	848	–	MISSISSIPPIAN	–		FROBISHER (DOUGLASTON UNIT)
3301	8.70	10.9	35.0	1.333	849	–	MISSISSIPPIAN	–		FROBISHER (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/87	REMAINING RESERVES	1987 PROD $1000\ m^3$
			----PER CENT----			----MILLION CUBIC METRES----					
STEELMAN	MIDALE (UNIT IA)	18.361	16.00	32.20	48.20	2.938	5.912	8.850	8.368	0.482	79.056
	MIDALE (UNIT II)	16.648	23.00	32.00	55.00	3.829	5.327	9.156	7.831	1.325	89.760
	MIDALE (UNIT III)	11.465	16.00	24.50	40.50	1.834	2.809	4.643	4.060	0.583	51.804
	MIDALE (UNIT IV)	13.443	15.00	26.50	41.50	2.016	3.562	5.578	4.905	0.673	79.034
	MIDALE (UNIT V)	6.555	15.00	11.40	26.40	0.983	0.747	1.730	1.633	0.097	13.973
	MIDALE (UNIT VI)	24.729	16.00	22.60	38.60	3.957	5.589	9.546	8.860	0.686	76.234
	MIDALE (UNIT VII)	2.508	10.00	26.80	36.80	0.251	0.672	0.923	0.761	0.162	12.628
	MIDALE (DOUGLASTON UNIT)	1.948	12.30	18.20	30.50	0.240	0.355	0.595	0.449	0.146	14.220
	MIDALE (LAMPMAN UNIT)	0.926	13.00	13.00	26.00	0.120	0.120	0.240	0.224	0.016	3.074
	MIDALE (NORTH VOL UNIT NO. 1)	1.949	9.50	3.00	12.50	0.185	0.058	0.243	0.168	0.075	13.511
	MIDALE (NORTH VOL UNIT NO. 2)	1.875	5.30	4.20	9.50	0.099	0.079	0.178	0.085	0.093	5.344
	MIDALE (NON-UNIT)	7.001	11.70	0.00	11.70	0.819	0.000	0.819	0.636	0.183	36.681
STORTHOAKS	ALIDA-TILSTON	3.657	21.00	0.00	21.00	0.768	0.000	0.768	0.648	0.120	15.371
VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)	1.479	11.50	0.00	11.50	0.170	0.000	0.170	0.161	0.009	4.591
	FROBISHER (NON-UNIT)	5.891	13.00	0.00	13.00	0.766	0.000	0.766	0.579	0.187	32.593
WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)	0.773	28.00	0.00	28.00	0.216	0.000	0.216	0.143	0.073	6.527
WAUCHOPE	ALIDA-TILSTON	1.899	14.00	0.00	14.00	0.266	0.000	0.266	0.121	0.145	30.997
WAUCHOPE NORTH	TILSTON	0.308	15.50	0.00	15.50	0.048	0.000	0.048	0.043	0.005	2.220
WEYBURN	MIDALE	1.021	5.50	0.00	5.50	0.056	0.000	0.056	0.027	0.029	8.507
WHITE BEAR	TILSTON	4.132	39.70	0.00	39.70	1.640	0.000	1.640	1.020	0.620	55.705
WHITE BEAR	TILSTON-SOURIS VALLEY	0.395	21.00	0.00	21.00	0.083	0.000	0.083	0.080	0.003	1.709
WILDWOOD	ALIDA	0.967	16.50	0.00	16.50	0.160	0.000	0.160	0.132	0.028	4.406
WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)	3.554	17.00	14.70	31.70	0.604	0.522	1.126	0.937	0.189	23.354
	FROBISHER-ALIDA (N CENTRAL VOL UNIT)	1.226	14.00	5.00	19.00	0.172	0.061	0.233	0.218	0.015	3.997
	FROBISHER-ALIDA (N DALES UNIT NO. 1)	1.149	35.00	13.00	48.00	0.402	0.149	0.551	0.514	0.037	5.868
	FROBISHER-ALIDA (KISBEY SD VOL UNIT)	0.254	50.00	0.00	50.00	0.127	0.000	0.127	0.119	0.008	1.352
	FROBISHER-ALIDA (NON-UNIT)	9.532	38.70	0.50	39.20	3.689	0.048	3.737	2.925	0.812	74.055
WINMORE	FROBISHER	0.558	7.00	0.00	7.00	0.039	0.000	0.039	0.032	0.007	1.789
WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)	5.014	16.70	19.80	36.50	0.837	0.993	1.830	1.682	0.148	24.303
	FROBISHER (NON-UNIT)	6.338	24.50	0.00	24.50	1.553	0.000	1.553	1.151	0.402	48.686
WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)	1.031	17.80	7.00	24.80	0.184	0.072	0.256	0.248	0.008	1.573
	MIDALE (VOLUNTARY UNIT NO. 2)	0.831	10.60	10.80	21.40	0.088	0.090	0.178	0.162	0.016	1.733
	MIDALE (NON-UNIT)	1.371	10.10	1.00	11.10	0.138	0.014	0.152	0.147	0.005	2.069
MISCELLANEOUS	ALIDA	3.600	7.30	0.00	7.30	0.263	0.000	0.263	0.123	0.140	22.135
	BAKKEN	1.602	37.00	0.00	37.00	0.593	0.000	0.593	0.108	0.485	29.821
	BIRDBEAR	0.117	7.00	0.00	7.00	0.008	0.000	0.008	0.004	0.004	0.765
	FROBISHER	18.574	6.70	0.00	6.70	1.244	0.000	1.244	0.574	0.670	108.265
	FROBISHER-ALIDA	8.367	8.80	0.00	8.80	0.736	0.000	0.736	0.427	0.309	43.540
	LOWER WATROUS	0.152	14.00	0.00	14.00	0.021	0.000	0.021	0.020	0.001	0.242
	MIDALE	4.047	5.20	0.00	5.20	0.210	0.000	0.210	0.146	0.064	16.108
	RATCLIFFE	0.905	5.50	0.00	5.50	0.050	0.000	0.050	0.017	0.033	4.621
	RED RIVER	0.775	7.00	0.00	7.00	0.054	0.000	0.054	0.050	0.004	0.472
	SOURIS VALLEY	2.977	1.90	0.00	1.90	0.057	0.000	0.057	0.044	0.013	5.695
	TILSTON	5.675	6.00	0.00	6.00	0.341	0.000	0.341	0.101	0.240	23.666
	TILSTON-SOURIS VALLEY	0.180	11.00	0.00	11.00	0.020	0.000	0.020	0.010	0.010	1.304
	WINNIPEGOSIS	6.555	8.20	0.00	8.20	0.538	0.000	0.538	0.072	0.466	51.570
	YEOMAN	0.208	9.50	0.00	9.50	0.020	0.000	0.020	0.020	0.000	0.000
	TOTAL AREA IV LIGHT	**562.612**				**101.324**	**36.553**	**137.877**	**109.791**	**28.086**	**2943.467**
	PROVINCIAL TOTAL	**3401.496**				**291.332**	**168.654**	**459.986**	**346.454**	**113.532**	**12033.733**

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
5463	4.20	17.1	35.0	1.389	843	1399	MISSISSIPPIAN	1954	STEELMAN	MIDALE (UNIT IA)
2072	9.50	16.5	28.8	1.389	858	–	MISSISSIPPIAN	–		MIDALE (UNIT II)
2818	4.60	18.9	35.0	1.389	827	–	MISSISSIPPIAN	–		MIDALE (UNIT III)
5308	3.30	16.4	35.0	1.389	824	–	MISSISSIPPIAN	–		MIDALE (UNIT IV)
2849	3.30	14.9	35.0	1.389	837	–	MISSISSIPPIAN	–		MIDALE (UNIT V)
6685	5.10	15.5	35.0	1.389	843	–	MISSISSIPPIAN	–		MIDALE (UNIT VI)
713	4.20	17.9	35.0	1.389	870	–	MISSISSIPPIAN	–		MIDALE (UNIT VII)
826	4.00	12.6	35.0	1.389	–	–	MISSISSIPPIAN	–		MIDALE (DOUGLASTON UNIT)
437	2.30	18.6	31.2	1.389	862	–	MISSISSIPPIAN	–		MIDALE (LAMPMAN UNIT)
971	4.10	10.0	32.0	1.389	–	–	MISSISSIPPIAN	–		MIDALE (NORTH VOL UNIT NO. 1)
551	6.10	12.3	37.0	1.389	–	–	MISSISSIPPIAN	–		MIDALE (NORTH VOL UNIT NO. 2)
3107	4.50	10.7	35.0	1.389	846	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
697	6.30	14.4	35.0	1.124	842	1066	MISSISSIPPIAN	1962	STORTHOAKS	ALIDA-TILSTON
129	17.10	12.0	35.0	1.163	873	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)
372	25.30	11.2	35.0	1.163	838	–	MISSISSIPPIAN	–		FROBISHER (NON-UNIT)
401	3.20	11.4	40.0	1.136	860	1242	MISSISSIPPIAN	1966	WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)
275	6.60	19.6	40.0	1.124	852	1140	MISSISSIPPIAN	1980	WAUCHOPE	ALIDA-TILSTON
81	4.70	15.0	40.0	1.111	852	1083	MISSISSIPPIAN	1971	WAUCHOPE NORTH	TILSTON
178	5.40	17.3	31.0	1.124	877	1377	MISSISSIPPIAN	1954	WEYBURN	MIDALE
453	13.30	12.7	40.0	1.111	862	1060	MISSISSIPPIAN	1957	WHITE BEAR	TILSTON
113	6.00	10.8	40.0	1.111	853	1189	MISSISSIPPIAN	1963	WHITE BEAR	TILSTON-SOURIS VALLEY
162	8.50	14.4	35.0	1.333	852	1184	MISSISSIPPIAN	1966	WILDWOOD	ALIDA
809	5.90	12.9	26.0	1.282	843	1249	MISSISSIPPIAN	1957	WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)
324	6.30	11.0	30.0	1.282	843	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (N CENTRAL VOL UNIT)
388	5.90	9.9	35.0	1.282	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (N DALES UNIT NO. 1)
81	3.40	20.0	40.0	1.299	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (KISBEY SD VOL UNIT)
1990	6.80	12.9	30.0	1.282	861	–	MISSISSIPPIAN	–		FROBISHER-ALIDA (NON-UNIT)
259	4.70	9.7	45.0	1.163	869	1140	MISSISSIPPIAN	1968	WINMORE	FROBISHER
1748	4.50	13.1	42.1	1.190	844	1237	MISSISSIPPIAN	1959	WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)
2556	4.90	10.4	42.1	1.190	861	–	MISSISSIPPIAN	–		FROBISHER (NON-UNIT)
671	1.90	14.8	35.0	1.190	838	1230	MISSISSIPPIAN	1960	WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)
356	3.10	15.7	39.3	1.266	–	–	MISSISSIPPIAN	–		MIDALE (VOLUNTARY UNIT NO. 2)
582	3.10	14.8	35.0	1.266	844	–	MISSISSIPPIAN	–		MIDALE (NON-UNIT)
1181	4.70	13.3	35.0	1.333	843	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
582	3.10	12.6	25.0	1.064	819	–	MISSISSIPPIAN	–		BAKKEN
65	2.50	11.3	25.0	1.176	838	–	DEVONIAN	–		BIRDBEAR
4450	8.00	10.7	35.0	1.333	843	–	MISSISSIPPIAN	–		FROBISHER
1553	8.70	12.7	35.0	1.333	858	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
81	2.30	16.5	45.0	1.111	–	–	MISSISSIPPIAN	–		LOWER WATROUS
1133	6.60	11.1	35.0	1.333	838	–	MISSISSIPPIAN	–		MIDALE
178	7.50	13.9	35.0	1.333	–	–	MISSISSIPPIAN	–		RATCLIFFE
129	11.30	10.9	35.0	1.333	853	–	ORDOVICIAN	–		RED RIVER
518	11.30	11.3	50.0	1.111	858	–	MISSISSIPPIAN	–		SOURIS VALLEY
922	8.20	13.9	40.0	1.111	849	–	MISSISSIPPIAN	–		TILSTON
64	7.90	7.9	50.0	1.111	843	–	MISSISSIPPIAN	–		TILSTON-SOURIS VALLEY
324	31.60	11.1	27.9	1.250	–	–	DEVONIAN	–		WINNIPEGOSIS
32	14.30	9.3	35.0	1.333	–	–	ORDOVICIAN	–		YEOMAN

RESERVOIR DATA

RESERVES AND

PRODUCTION—GAS

FIVE YEAR GAS SUMMARY

	1983	1984	1985	1986	1987
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	73 224.3	84 415.1	90 679.9	96 103.9	100 408.3
Associated	1 683.5	1 683.5	1 822.6	1 949.0	1 922.5
Dissolved	5 756.5	5 972.5	6 535.2	7 561.5	7 602.6
PROVINCIAL TOTAL	80 664.3	92 071.1	99 037.7	105 614.4	109 933.4
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	46 661.8	56 407.4	61 008.5	64 434.6	66 487.0
Associated	838.9	837.4	942.9	1 039.0	983.4
Dissolved	966.5	994.2	1 316.1	2 078.2	1 812.0
PROVINCIAL TOTAL	48 467.2	58 239.0	63 267.5	67 551.8	69 282.4
YEARLY PRODUCTION (Million Cubic Metres)					
Non-Associated	1 138.1	1 445.2	1 639.7	1 998.6	2 228.1
Associated	1.4	3.9	23.5	30.2	29.3
Dissolved	88.0	188.3	240.8	264.2	307.3
PROVINCIAL TOTAL	1 227.5	1 637.4	1 904.0	2 293.0	2 564.7
NUMBER OF PRODUCING WELLS					
Non-Associated	919	1 040	1 545	2 070	2 331
Associated	7	7	15	15	15
PROVINCIAL TOTAL	926	1 047	1 560	2 085	2 346
AVERAGE DAILY PRODUCTION (Million Cubic Metres Per Day)					
Non-Associated	5.932	7.705	8.981	9.492	11.049
Associated	0.005	0.047	0.092	0.084	0.081
Dissolved	0.241	0.516	0.659	0.724	0.844
PROVINCIAL TOTAL	6.178	8.268	9.732	10.300	11.974

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/87	REMAINING RESERVES DEC 31/87	ESTIMATED HEATING VALUE MJ/m^3
		----------MILLION CUBIC METRES----------						
NON-ASSOCIATED GAS RESERVES								
BAYHURST	VIKING (VOLUNTARY UNIT)	2587.7	80	5	1951.5	1871.1	80.4	37.4
BAYHURST WEST	VIKING (VOLUNTARY UNIT)	304.7	75	5	217.1	190.2	26.9	35.6
BEACON HILL	MANNVILLE	4541.7	85	5	3667.4	1594.6	2072.8	35.6
BEACON HILL WEST	MANNVILLE SAND	1726.9	80	5	1312.4	121.5	1190.9	35.9
BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)	378.0	90	5	323.2	242.3	80.9	36.9
BIGSTICK	SECOND WHITE SPECKS	11093.0	65	5	6849.9	873.4	5976.5	35.6
BROCK	VIKING UNIT	765.2	80	5	581.6	565.5	16.1	36.3
BROCK EAST	VIKING SAND	310.0	35	5	103.1	10.7	92.4	34.6
BRONSON LAKE	COLONY SAND	314.5	80	5	239.0	0.0	239.0	35.9
	WASECA SAND	22.1	75	5	15.7	0.0	15.7	36.3
BURSTALL	MEDICINE HAT SAND	450.1	80	5	342.1	5.7		35.4
	MILK RIVER	235.1	65	5	145.2	5.7	411.5	35.4
	MILK RIVER-MEDICINE HAT					64.4		35.4
BURSTALL NORTH	VIKING SAND	231.9	80	5	176.2	35.1	141.1	35.6
CAVALIER	SPINNEY HILL SAND	120.0	80	5	91.2	84.8	6.4	32.4
COLEVILLE-SMILEY	VIKING (UNIT)	6978.7	85	5	5635.3	5029.2	606.1	38.4
	VIKING (NON-UNIT)	58.4	80	5	44.4	33.7	10.7	38.3
DODSLAND NORTH	VIKING SAND (UNIT)	843.4	80	5	641.0	472.0	169.0	40.7
	VIKING SAND (NON-UNIT)	2163.0	65	5	1335.7	103.5	1232.2	40.7
DRIVER	BAKKEN SAND	259.7	75	5	185.0	7.8	177.2	37.2
	MANNVILLE SAND	279.5	75	5	199.1	16.0	183.1	37.1
FORT PITT	MANNVILLE SAND	356.0	80	5	270.6	74.6	196.0	35.9
FORT PITT NORTH	MANNVILLE SAND	463.6	80	5	352.3	141.9	210.4	37.0
GLIDDEN	VIKING SAND (VOL UNIT NO. 1)	484.0	50	5	229.9	87.9	142.0	35.8
GREENAN	VIKING SAND	1347.9	30	5	384.2	318.7	65.5	35.2
GULL LAKE	CANTUAR SAND	999.9	70	5	664.9	485.2	179.7	38.4
HATTON	MEDICINE HAT SAND (UNIT)	6871.3	80	5	5222.2	4105.8	1116.4	35.4
	MEDICINE HAT SAND (AGREEMENT AREA)	1969.2	80	5	1496.6	722.3	774.3	35.4
	MEDICINE HAT SAND (NON-UNIT)	10391.6	80	5	7897.6	1921.5		35.4
	MILK RIVER	49871.4	65	5	30795.6	4577.6	29949.2	35.4
	MILK RIVER - MEDICINE HAT					2244.9		35.4
HOOSIER	VIKING SAND (UNIT)	4643.4	60	5	2646.7	2398.8	247.9	37.3
	VIKING SAND (NON-UNIT)	35.1	60	5	20.0	20.0	0.0	37.3
LIEBENTHAL	MILK RIVER	418.9	65	5	258.7	170.2	88.5	35.4
LLOYDMINSTER	COLONY SAND	248.2	95	5	222.2	221.6	0.6	34.4
LOVERNA NORTH	MANNVILLE SAND	41.6	75	5	29.6	0.0	29.6	37.3
LOVERNA SOUTH	BAKKEN SAND	467.7	80	5	356.5	303.5	52.0	37.4
	VIKING SAND	239.1	75	5	170.4	115.4	55.0	37.9
MARENGO	VIKING SAND	323.7	80	5	246.0	0.6	245.4	36.3
MILTON	VIKING SAND	1047.2	85	5	845.6	806.5	39.1	37.3
PIERCELAND	MANNVILLE SAND	1581.1	93	5	1396.9	598.5	798.4	36.5
SENATE	SECOND WHITE SPECKS	215.8	70	5	143.5	0.4	143.1	35.6
TANGLEFLAGS	COLONY SAND	625.0	75	5	445.3	311.4	133.9	35.9
	MCLAREN SAND	519.3	75	5	370.0	198.0	172.0	35.6
	SECOND WHITE SPECKS	112.5	75	5	80.2	25.2	55.0	36.1
	ST.WALBURG SAND	123.5	75	5	88.0	27.7	60.3	35.8
TOTNES	VIKING SAND (VOLUNTARY UNIT)	465.8	80	5	354.0	297.9	56.1	35.5
	VIKING SAND (NON-UNIT)	155.2	80	5	118.0	1.6	116.4	35.5
UNITY FIELD	SPARKY SAND	72.0	73	5	49.9	9.4	40.5	35.2
	UNITY SAND	312.3	90	5	267.0	267.0	0.0	33.6
	VIKING SAND	74.0	65	5	45.7	17.3	28.4	37.4
WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)	608.3	85	5	491.2	434.6	56.6	37.4
WHITESIDE WEST	RIBSTONE CREEK SAND	83.3	80	5	63.3	43.6	19.7	36.0
	VIKING SAND	872.4	50	5	414.4	34.1	380.3	39.1
MISCELLANEOUS	ALIDA	48.9			39.5	4.8	34.7	39.9

NATURAL GAS RESERVOIR DATA

1987 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	AVERAGE CONNATE WATER CENT----	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
										NON-ASSOCIATED GAS RESERVES	
8.613	0.320	8903	2.71	25.0	35.0	0.580	661	CRETACEOUS	1958	BAYHURST	VIKING (VOLUNTARY UNIT)
4.526	0.151	1333	1.62	30.5	35.0	0.580	696	CRETACEOUS	1968	BAYHURST WEST	VIKING (VOLUNTARY UNIT)
3.723	0.235	21107	4.66	35.0	40.0	0.568	274	CRETACEOUS	1983	BEACON HILL	MANNVILLE
31.661	0.151	2849	5.44	35.0	40.0	0.573	310	CRETACEOUS	1978	BEACON HILL WEST	MANNVILLE SAND
11.899	0.033	874	2.53	28.1	33.0	0.583	972	CRETACEOUS	1965	BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)
367.862	2.210	35849	3.34	20.4	30.0	0.580	692	CRETACEOUS	1980	BIGSTICK	SECOND WHITE SPECKS
4.078	0.012	5696	2.19	14.5	40.0	0.588	716	CRETACEOUS	1951	BROCK	VIKING UNIT
0.000	0.000	3108	0.91	24.0	40.0	0.597	720	CRETACEOUS	1967	BROCK EAST	VIKING SAND
0.000	0.000	1276	4.54	28.0	28.0	0.574	455	CRETACEOUS	1974	BRONSON LAKE	COLONY SAND
0.000	0.000	288	2.02	22.5	43.0	0.570	457	CRETACEOUS	1988		WASECA SAND
1.467	0.005	2719	2.80	16.0	20.0	0.575	520	CRETACEOUS	1952	BURSTALL	MEDICINE HAT SAND
1.518	0.005	2719	2.61	16.0	45.0	0.574	460	CRETACEOUS	1952		MILK RIVER
19.430	0.063							CRETACEOUS	1952		MILK RIVER-MEDICINE HAT
11.729	0.081	1011	1.90	26.0	45.0	0.580	748	CRETACEOUS	1973	BURSTALL NORTH	VIKING SAND
0.000	0.000	1518	1.22	25.0	30.0	0.620	400	CRETACEOUS	1972	CAVALIER	SPINNEY HILL SAND
49.346	0.196	20979	3.05	22.5	32.0	0.600	686	CRETACEOUS	1951	COLEVILLE-SMILEY	VIKING (UNIT)
1.169	0.004	226	2.44	25.5	32.0	0.608	686	CRETACEOUS	1951		VIKING (NON-UNIT)
12.421	0.056	4452	2.01	22.4	35.0	0.615	669	CRETACEOUS	1953	DODSLAND NORTH	VIKING SAND (UNIT)
15.872	0.072	12756	1.80	22.4	35.0	0.621	669	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
7.823	0.044	999	2.66	17.0	25.0	0.564	800	MISSISSIPPIAN	1985	DRIVER	BAKKEN SAND
15.996	0.045	1222	2.27	24.5	45.0	0.578	748	CRETACEOUS	1985		MANNVILLE SAND
14.837	0.069	1275	5.12	23.2	15.5	0.578	388	CRETACEOUS	1972	FORT PITT	MANNVILLE SAND
30.311	0.132	1962	3.73	27.2	17.9	0.568	473	CRETACEOUS	1971	FORT PITT NORTH	MANNVILLE SAND
3.177	0.013	5893	0.88	21.0	40.0	0.584	694	CRETACEOUS	1953	GLIDDEN	VIKING SAND (VOL UNIT NO. 1)
5.672	0.030	5952	1.98	24.6	35.0	0.596	655	CRETACEOUS	1969	GREENAN	VIKING SAND
2.711	0.007	2011	3.14	23.0	30.0	0.598	1057	CRETACEOUS	1957	GULL LAKE	CANTUAR SAND
44.517	0.163	43491	3.26	21.0	50.0	0.575	477	CRETACEOUS	1953	HATTON	MEDICINE HAT SAND (UNIT)
18.979	0.071	13727	2.96	21.0	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (AGREEMENT AREA)
86.738	0.378	89754	2.74	18.3	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (NON-UNIT)
501.948	2.009	196477	7.38	16.0	45.0	0.574	335	CRETACEOUS	1953		MILK RIVER
651.391	3.223							CRETACEOUS	1953		MILK RIVER - MEDICINE HAT
17.833	0.077	12488	3.32	23.0	32.0	0.600	732	CRETACEOUS	1953	HOOSIER	VIKING SAND (UNIT)
0.000	0.000	129	3.81	23.0	32.0	0.600	732	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
15.017	0.051	5915	2.03	16.0	45.0	0.578	396	CRETACEOUS	1974	LIEBENTHAL	MILK RIVER
0.360	0.003	1012	4.16	25.0	30.0	0.566	516	CRETACEOUS	1935	LLOYDMINSTER	COLONY SAND
0.000	0.000	259	1.82	24.7	56.3	0.578	768	CRETACEOUS	1973	LOVERNA NORTH	MANNVILLE SAND
9.265	0.025	1613	2.08	20.2	21.0	0.580	826	MISSISSIPPIAN	1973	LOVERNA SOUTH	BAKKEN SAND
5.801	0.016	2059	2.01	22.5	53.0	0.592	689	CRETACEOUS	1973		VIKING SAND
0.000	0.000	1410	1.89	25.0	35.0	0.576	728	CRETACEOUS	1954	MARENGO	VIKING SAND
5.635	0.016	4667	1.74	25.0	32.0	0.604	732	CRETACEOUS	1954	MILTON	VIKING SAND
5.746	0.287	3818	9.27	35.0	40.0	0.564	272	CRETACEOUS	1969	PIERCELAND	MANNVILLE SAND
0.312	0.001	777	3.05	23.0	40.0	0.578	808	CRETACEOUS	1971	SENATE	SECOND WHITE SPECKS
24.223	0.078	999	6.90	33.5	15.0	0.600	488	CRETACEOUS	1965	TANGLEFLAGS	COLONY SAND
16.612	0.053	1258	5.20	31.6	25.0	0.591	475	CRETACEOUS	1965		MCLAREN SAND
8.216	0.024	1234	1.50	32.0	40.0	0.591	286	CRETACEOUS	1965		SECOND WHITE SPECKS
8.073	0.021	713	2.50	33.0	40.0	0.581	315	CRETACEOUS	1965		ST.WALBURG SAND
4.183	0.024	1554	2.71	25.0	40.0	0.584	613	CRETACEOUS	1969	TOTNES	VIKING SAND (VOLUNTARY UNIT)
0.000	0.000	518	2.71	25.0	40.0	0.584	613	CRETACEOUS	1969		VIKING SAND (NON-UNIT)
3.311	0.037	518	2.24	26.0	56.0	0.580	606	CRETACEOUS	1985	UNITY FIELD	SPARKY SAND
0.000	0.000	2161	4.88	26.0	20.0	0.600	632	CRETACEOUS	1944		UNITY SAND
1.153	0.007	777	1.22	21.6	35.0	0.600	503	CRETACEOUS	1945		VIKING SAND
8.455	0.033	2987	4.11	35.0	30.0	0.568	229	CRETACEOUS	1982	WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)
18.712	0.070	917	3.85	26.3	25.0	0.572	248	CRETACEOUS	1984	WHITESIDE WEST	RIBSTONE CREEK SAND
5.901	0.024	3980	2.22	22.8	32.0	0.578	724	CRETACEOUS	1956		VIKING SAND
0.000	0.000	129	–	–	–	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/87	REMAINING RESERVES DEC 31/87	ESTIMATED HEATING VALUE MAJ/m^3
					----------MILLION CUBIC METRES----------			
MISCELLANEOUS	BAKKEN	1655.4			1214.4	142.7	1071.7	37.8
	CANTUAR	391.7			243.2	58.4	184.8	35.2
	COLONY	5366.0			4982.4	484.4	4498.0	34.4
	CUMMINGS	13.0			9.9	5.1	4.8	36.6
	DETRITAL	839.5			645.0	0.0	645.0	38.0
	LLOYDMINSTER	111.9			82.7	32.6	50.1	34.4
	MANNVILLE	5646.4			4121.8	157.0	3964.8	37.4
	MCLAREN	1107.9			828.7	480.4	348.3	34.4
	MEDICINE HAT	4.7			4.7	0.0	4.7	35.4
	MILK RIVER	1256.5			775.8	0.0	775.8	35.9
	REX	90.3			68.3	9.2	59.1	34.4
	RIBSTONE CREEK	87.5			61.0	14.4	46.6	34.4
	ROSERAY	352.9			260.5	46.6	213.9	37.4
	SECOND WHITE SPECKS	2774.4			1814.2	2.7	1811.5	35.4
	SPARKY	141.8			101.0	19.3	81.7	34.4
	SPINNEY HILL	101.9			78.7	5.5	71.2	32.0
	ST. WALBURG	590.6			452.0	5.3	446.7	35.2
	UPPER SHAUNAVON	525.9			374.5	0.6	373.9	36.0
	VIKING	6254.0			3692.7	137.7	3555.0	37.4
	WASECA	94.3			67.2	3.7	63.5	34.2
	TOTAL NON-ASSOCIATED	**148137.4**			**100408.3**	**33921.3**	**66487.0**	
ASSOCIATED GAS RESERVES								
ABERFELDY	SPARKY SAND	125.4	80	5	95.3	62.7	32.6	34.4
ALIDA EAST	ALIDA	833.4	45	5	356.3	160.7	195.6	45.0
ALIDA WEST	ALIDA	81.9	85	5	66.1	0.0	66.1	45.0
AVON HILL	VIKING SAND	10.6	80	5	8.1	0.0	8.1	37.4
BUFFALO COULEE	BAKKEN SAND	3.5	60	5	2.0	2.0	0.0	37.2
CANTUAR EAST	CANTUAR SAND	914.1	90	3	798.0	569.3	228.7	37.4
COSINE LAKE	LLOYDMINSTER SAND	170.9	66	5	107.2	42.9	64.3	34.4
DEE VALLEY	WASECA SAND	75.5	70	5	50.2	0.0	50.2	37.2
EPPING	SPARKY SAND	9.8	80	5	7.4	2.6	4.8	34.4
EUREKA	VIKING SAND	12.5	80	5	9.5	8.5	1.0	40.7
HOOSIER	BAKKEN SAND	63.1	90	5	54.0	13.2	40.8	37.9
LASHBURN	WASECA SAND	11.3	80	5	8.6	3.1	5.5	34.4
LONE ROCK	SPARKY SAND	2.5	80	5	1.9	0.2	1.7	34.4
MARSDEN SOUTH	SPARKY SAND (VOLUNTARY UNIT NO. 1)	93.6	50	5	44.5	20.9	23.6	34.4
NORTH HOOSIER	BAKKEN SAND	11.0	85	5	8.9	4.0	4.9	37.7
NOTTINGHAM	ALIDA	211.2	90	5	180.6	0.0	180.6	45.0
SENLAC	LLOYDMINSTER SAND	214.1	43	5	87.5	25.8	61.7	34.4
SILVERDALE	SPARKY SAND	27.2	80	5	20.7	12.4	8.3	34.4
SMILEY-DEWAR	VIKING SAND	15.7	80	5	11.9	7.8	4.1	38.3
TANGLEFLAGS	SPARKY SAND	4.7	85	5	3.8	3.0	0.8	34.4
	TOTAL ASSOCIATED	**2892.9**			**1922.5**	**939.1**	**983.4**	
DISSOLVED GAS RESERVES								
	AREA II				1754.1	997.5	756.6	
	AREA III				414.1	363.2	50.9	
	AREA IV				5434.4	4429.9	1004.5	
	TOTAL DISSOLVED				**7602.6**	**5790.6**	**1812.0**	
	PROVINCIAL TOTALS	**151029.4**			**109933.4**	**40651.0**	**69282.4**	

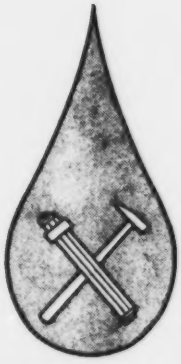
NATURAL GAS RESERVOIR DATA

1987 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER	AVERAGE CONNATE WATER CENT---	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
6.253	0.017	1926	–	–	–	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	BAKKEN
0.440	0.001	682	–	–	–	–	–	CRETACEOUS	–		CANTUAR
55.773	0.193	8033	–	–	–	–	–	CRETACEOUS	–		COLONY
0.301	0.008	32	–	–	–	–	–	CRETACEOUS	–		CUMMINGS
0.000	0.000	0	–	–	–	–	–	PRE-CRETACEOUS	–		DETRITAL
0.105	0.003	131	–	–	–	–	–	CRETACEOUS	–		LLOYDMINSTER
0.664	0.001	2150	–	–	–	–	–	CRETACEOUS	–		MANNVILLE
45.779	0.133	4125	–	–	–	–	–	CRETACEOUS	–		MCLAREN
0.000	0.000	0	–	–	–	–	–	CRETACEOUS	–		MEDICINE HAT
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		MILK RIVER
1.368	0.004	294	–	–	–	–	–	CRETACEOUS	–		REX
5.857	0.020	1554	–	–	–	–	–	CRETACEOUS	–		RIBSTONE CREEK
0.000	0.000	1708	–	–	–	–	–	CRETACEOUS	–		ROSERAY
1.578	0.007	3367	–	–	–	–	–	CRETACEOUS	–		SECOND WHITE SPECKS
5.560	0.018	400	–	–	–	–	–	CRETACEOUS	–		SPARKY
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		SPINNEY HILL
2.501	0.007	518	–	–	–	–	–	CRETACEOUS	–		ST. WALBURG
0.000	0.000	0	–	–	–	–	–	JURASSIC	–		UPPER SHAUNAVON
5.508	0.014	2067	–	–	–	–	–	CRETACEOUS	–		VIKING
0.000	0.000	478	–	–	–	–	–	CRETACEOUS	–		WASECA
2228.109	**11.049**										**TOTAL NON-ASSOCIATED**
											ASSOCIATED GAS RESERVES
0.000	0.000	678	2.44	25.0	30.0	0.595	529	CRETACEOUS	1958	ABERFELDY	SPARKY SAND
0.000	0.000	656	5.79	18.1	20.0	0.700	1116	MISSISSIPPIAN	1954	ALIDA EAST	ALIDA
0.000	0.000	214	3.05	14.3	31.0	0.700	1137	MISSISSIPPIAN	1955	ALIDA WEST	ALIDA
0.000	0.000	40	2.13	25.0	30.0	0.600	678	CRETACEOUS	1959	AVON HILL	VIKING SAND
0.000	0.000	8	3.05	23.0	25.0	0.585	808	MISSISSIPPIAN	1953	BUFFALO COULEE	BAKKEN SAND
0.000	0.000	1127	8.69	25.6	41.0	0.599	960	CRETACEOUS	1957	CANTUAR EAST	CANTUAR SAND
9.824	0.027	483	2.92	30.0	35.0	0.600	770	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
0.000	0.000	663	1.50	30.0	30.0	0.597	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
0.000	0.000	65	2.44	25.0	20.0	0.609	610	CRETACEOUS	1967	EPPING	SPARKY SAND
0.148	0.001	65	2.01	22.4	35.0	0.622	689	CRETACEOUS	1954	EUREKA	VIKING SAND
1.034	0.003	142	2.44	25.0	36.0	0.576	852	MISSISSIPPIAN	1972	HOOSIER	BAKKEN SAND
0.000	0.000	129	4.51	25.0	30.0	0.582	498	CRETACEOUS	1966	LASHBURN	WASECA SAND
0.000	0.000	16	2.44	25.0	30.0	0.600	560	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
2.238	0.006	518	2.04	30.0	35.0	0.600	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOLUNTARY UNIT NO. 1)
0.000	0.000	83	1.52	20.0	25.0	0.600	831	MISSISSIPPIAN	1960	NORTH HOOSIER	BAKKEN SAND
0.000	0.000	354	6.10	16.7	34.0	0.700	1061	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA
15.731	0.043	1332	1.16	30.0	25.0	0.600	787	CRETACEOUS	1980	SENLAC	LLOYDMINSTER SAND
0.000	0.000	129	3.05	25.0	30.0	0.596	573	CRETACEOUS	1965	SILVERDALE	SPARKY SAND
0.278	0.001	65	2.29	25.5	32.0	0.606	694	CRETACEOUS	1973	SMILEY-DEWAR	VIKING SAND
0.000	0.000	24	3.05	25.0	30.0	0.595	511	CRETACEOUS	1969	TANGLEFLAGS	SPARKY SAND
29.253	**0.081**										**TOTAL ASSOCIATED**
											DISSOLVED GAS RESERVES
132.303	0.362										AREA II
8.254	0.025										AREA III
166.760	0.457										AREA IV
307.317	**0.844**										**TOTAL DISSOLVED**
2564.679	**11.974**										**PROVINCIAL TOTALS**

OIL AND GAS UNITS

AND ENHANCED

RECOVERY PROJECTS



OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
ABERFELDY UNIT	HUSKY	SPARKY	12-1-62	5-1-66	WATERFLOOD (SUSPENDED)
					IN-SITU WET COMBUSTION
					STEAMFLOOD (SUSPENDED)
BIG GULLY VOLUNTARY UNIT NO. 1	HUSKY	WASECA & MCLAREN	10-1-70	1-1-71	WATERFLOOD (SUSPENDED)
GOLDEN LAKE VOLUNTARY UNIT	HUSKY	SPARKY & WASECA	1-1-71	11-1-71	WATERFLOOD (SUSPENDED)
GULLY LAKE WASECA VOLUNTARY UNIT NO. 1	HUSKY	WASECA	8-1-71	–	WATERFLOOD
LASHBURN WASECA VOLUNTARY UNIT	HUSKY	WASECA	4-1-68	6-1-71	WATERFLOOD (SUSPENDED)
MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	SASKOIL	SPARKY	12-1-85	–	WATERFLOOD
NORTH DULWICH SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	10-1-70	–	WATERFLOOD
NORTHMINSTER SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	3-1-70	9-1-70	WATERFLOOD (SUSPENDED)
SOUTH ABERFELDY SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	6-1-69	5-1-70	WATERFLOOD
SOUTH EPPING UNIT NO. 1	TEXACO	SPARKY & G.P.	2-1-66	9-1-67	WATERFLOOD
SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	TEXACO	SPARKY	1-1-72	7-1-73	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 2	DOME	LLOYDMINSTER	3-1-81	–	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 3	MOBIL	G.P., MCLAREN & LLOYDMINSTER	2-1-81	–	–
AREA II					
AVON HILL VIKING VOLUNTARY UNIT	CAN. FUTURITY	VIKING	8-1-85	–	WATERFLOOD
BAYHURST VIKING VOLUNTARY GAS UNIT	SPC	VIKING	11-1-66	–	GAS STORAGE
BROCK VIKING SAND GAS UNIT	HUSKY	VIKING	3-1-54	–	–
COLEVILLE-SMILEY VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	7-1-55	4-1-72	–
DODSLAND VIKING GAS VOLUNTARY UNIT	DOME	VIKING	11-1-67	1-1-70	–
EAGLE LAKE VIKING VOLUNTARY UNIT	ESSO RESOURCES	VIKING	10-1-66	–	WATERFLOOD
EAST DODSLAND VIKING VOLUNTARY UNIT	PAGE	VIKING	9-1-85	–	WATERFLOOD
GLENEATH UNIT	ERSKINE	VIKING	6-1-66	10-1-67	WATERFLOOD
GLENEATH SOUTH VIKING VOLUNTARY UNIT	ULTRAMAR	VIKING	9-1-85	–	WATERFLOOD
GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1	WESTAR	VIKING	9-1-72	–	–
HOOSIER BAKKEN SAND VOL. UNIT NO. 1	DOME	BAKKEN	3-1-81	–	WATERFLOOD
HOOSIER VIKING SAND GAS UNIT	UNITED CANSO	VIKING	8-1-57	–	–
KIYIU LAKE VIKING VOLUNTARY UNIT	CAN. FUTURITY	VIKING	12-1-85	–	–
LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT	ULTRAMAR	VIKING	6-1-71	–	–
NORTH DODSLAND VIKING VOLUNTARY UNIT	CAN. FUTURITY	VIKING	6-1-85	–	WATERFLOOD
NORTH EUREKA UNIT	UNITED CANSO	VIKING	9-1-65	12-1-71	WATERFLOOD
NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	DOME	BAKKEN	7-1-70	8-1-73	WATERFLOOD
NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	ERSKINE	MANNVILLE	1-1-69	5-1-80	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	UNIT NAME
						AREA I
MANNVILLE	INV. 9-SPOT & 5-SPOT	142	–	05-64	–	ABERFELDY UNIT
GLACIAL DRIFT	INV. 9-SPOT & 5-SPOT	11	–	07-69	–	
SURFACE WATER	INV. 9-SPOT	25	0	02-81	–	
DINA	5-SPOT	23	– –	10-70	– –	BIG GULLY VOLUNTARY UNIT NO. 1
DINA	MOD. 9-SPOT	56	– –	04-71	– –	GOLDEN LAKE VOLUNTARY UNIT
DINA	INV. & MOD. 9-SPOT	28	3	07-71	37	GULLY LAKE WASECA VOLUNTARY UNIT NO. 1
DINA	5-SPOT	46	–		–	LASHBURN WASECA VOLUNTARY UNIT
DINA	INV. 9-SPOT	37	13	12-85	1120	MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1
GLACIAL DRIFT	–	1	0	10-70	0	NORTH DULWICH SPARKY VOLUNTARY UNIT
DINA	5-SPOT	30	2	10-70	239	NORTHMINSTER SPARKY VOLUNTARY UNIT
DINA	5-SPOT	57	0	09-69	0	SOUTH ABERFELDY SPARKY VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	64	22	08-66	699	SOUTH EPPING UNIT NO. 1
DINA	INV. 9-SPOT	39	13	03-72	429	SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1
SURFACE WATER	INV. 9-SPOT	18	5	–	320	TANGLEFLAGS VOLUNTARY UNIT NO. 2
–	–	42	–	–	–	TANGLEFLAGS VOLUNTARY UNIT NO. 3
						AREA II
DEADWOOD	INV. 9-SPOT	66	23	12-85	280	AVON HILL VIKING VOLUNTARY UNIT
–	–	–	–	–	–	BAYHURST VIKING VOLUNTARY GAS UNIT
–	–	2	–	–	–	BROCK VIKING SAND GAS UNIT
–	–	33	–	–	–	COLEVILLE-SMILEY VIKING SAND GAS UNIT
–	–	12	–	–	–	DODSLAND VIKING GAS VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	200	2	01-67	70	EAGLE LAKE VIKING VOLUNTARY UNIT
DEADWOOD	5-SPOT	240	154	10-85	1529	EAST DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	125	35	10-66	420	GLENEATH UNIT
BELLY RIVER	INV. 9-SPOT	6	2	07-85	2	GLENEATH SOUTH VIKING VOLUNTARY UNIT
–	–	2	–	–	–	GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	8	2	01-75	119	HOOSIER BAKKEN SAND VOL. UNIT NO. 1
–	–	16	–	–	–	HOOSIER VIKING SAND GAS UNIT
–	–	51	–	–	–	KIYIU LAKE VIKING VOLUNTARY UNIT
–	–	7	–	–	–	LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT
DEADWOOD	INV. 9-SPOT	74	30	12-85	290	NORTH DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	40	10	03-63	365	NORTH EUREKA UNIT
RIBSTONE CREEK	LINE DRIVE	16	3	08-70	855	NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT
LEA PARK	–	19	7	12-66	551	NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
PLATO VIKING VOLUNTARY UNIT NO. 1	TRI LINK	VIKING	4-1-73	–	WATERFLOOD
SOUTH EUREKA UNIT	ULTRAMAR	VIKING	4-1-85	9-1-71	WATERFLOOD
TOTNES VIKING GAS VOLUNTARY UNIT NO. 1	ICG RESOURCES	VIKING	1-1-71	–	–
WEST BAYHURST VIKING GAS VOLUNTARY UNIT	ALTEX	VIKING	2-1-72	–	–
WHITESIDE VIKING VOLUNTARY UNIT	JCIP	VIKING	9-1-85	–	WATERFLOOD
WHITESIDE VICTORIA VOLUNTARY GAS UNIT	ULTRAMAR	VICTORIA	1-1-68	–	–
AREA III					
ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	3-1-75	–	WATERFLOOD
BATTRUM UNIT NO. 1	MOBIL	ROSERAY	10-1-64	6-1-69	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 2	MOBIL	ROSERAY	10-1-64	–	IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 3	MOBIL	ROSERAY	6-1-66	–	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 4	SCEPTRE	ROSERAY	6-1-66	–	WATERFLOOD
BEVERLEY UNIT NO. 1	MOBIL	UPPER & LOWER ROSERAY	5-1-66	–	WATERFLOOD
BONE CREEK UNIT	SASKOIL	UPPER SHAUNAVON	6-1-58	7-1-60	WATERFLOOD
BUTTE VOLUNTARY UNIT	DOME	UPPER SHAUNAVON	1-1-71	2-1-72	WATERFLOOD
CANTUAR UNIT	MOBIL	CANTUAR & LOWER ROSERAY	10-1-59	–	WATERFLOOD
COVINGTON UNIT NO. 1	CAN. NORTHWEST	UPPER SHAUNAVON	7-1-69	–	WATERFLOOD
DELTA UNIT NO. 1	MOBIL	UPPER SHAUNAVON	4-1-66	6-1-69	WATERFLOOD
DELTA UNIT NO. 2	MOBIL	UPPER SHAUNAVON	8-1-69	–	WATERFLOOD
DELTA VOLUNTARY UNIT NO. 3	MOBIL	UPPER SHAUNAVON	12-1-86	–	WATERFLOOD
DOLLARD UNIT	ENCOR ENERGY	UPPER SHAUNAVON	9-1-55	7-1-72	WATERFLOOD
EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1	MOBIL	CANTUAR	8-1-78	–	–
EAST CANTUAR GAS UNIT	DOME	CANTUAR & ROSERAY	3-1-75	–	GAS STORAGE
EAST CANTUAR UNIT NO. 1	MOBIL	CANTUAR & ROSERAY	3-1-75	–	WATERFLOOD (CANTUAR & ROSERAY)
EAST CANTUAR UNIT NO. 2	DOME	ROSERAY & CANTUAR	3-1-75	–	WATERFLOOD (ROSERAY)
EAST DOLLARD VOLUNTARY UNIT	AMERICAN EAGLE	UPPER SHAUNAVON	10-1-70	–	WATERFLOOD
FOSTERTON MAIN UNIT	MOBIL	ROSERAY	7-1-58	–	WATERFLOOD
FOSTERTON N.W. UNIT	MOBIL	ROSERAY	7-1-58	9-1-70	WATERFLOOD (SUSPENDED) IN-SITU WET COMBUSTION
GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	DOME	CANTUAR	5-1-72	–	WATERFLOOD
GULL LAKE NORTH SHAUNAVON POOL UNIT	MOBIL	UPPER SHAUNAVON	10-1-58	–	WATERFLOOD
GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	MOBIL	UPPER SHAUNAVON	7-1-86	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	ACTIVE WELLS 12/87 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	UNIT NAME
BELLY RIVER	INV. 9-SPOT	22	1	01-73	32	PLATO VIKING VOLUNTARY UNIT NO. 1
RIBSTONE CREEK & BELLY RIVER	INV. 9-SPOT	64	19	09-73	342	SOUTH EUREKA UNIT
–	–	2	–	–	–	TOTNES VIKING GAS VOLUNTARY UNIT NO. 1
–	–	1	–	–	–	WEST BAYHURST VIKING GAS VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	22	8	05-65	96	WHITESIDE VIKING VOLUNTARY UNIT
–	–	2	–	–	–	WHITESIDE VICTORIA VOLUNTARY GAS UNIT
						AREA III
ROSERAY	–	3	1	10-78	14	ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	75	2	03-62	1826	BATTRUM UNIT NO. 1
–	–		7	10-66		
–	–	23	2	11-65	358	BATTRUM UNIT NO. 2
MANNVILLE	INV. 9-SPOT	22	2	12-66	327	BATTRUM UNIT NO. 3
–	–		3	08-67		
MANNVILLE	INV. 9-SPOT	15	4	08-66	694	BATTRUM UNIT NO. 4
MANNVILLE	PERIPHERAL	15	3	01-68	757	BEVERLEY UNIT NO. 1
BELLY RIVER	PERIPHERAL & INV. 9-SPOT	27	14	05-60	1411	BONE CREEK UNIT
BELLY RIVER	INV. 9-SPOT	32	10	11-70	369	BUTTE VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	81	25	08-60	4648	CANTUAR UNIT
		17	–	–	–	
ROSERAY SAND	–	4	1	11-68	81	COVINGTON UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	32	10	12-65	1715	DELTA UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	13	3	10-69	297	DELTA UNIT NO. 2
BELLY RIVER	PERIPHERAL	3	1	07-87	66	DELTA VOLUNTARY UNIT NO. 3
VIKING, BELLY RIVER & MANNVILLE	SEMI-PERIPHERAL	39	15	03-56	2504	DOLLARD UNIT
–	–	2	–	–	–	EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1
–	–	–	–	–	–	EAST CANTUAR GAS UNIT
MANNVILLE	–	6	2	09-75	214	EAST CANTUAR UNIT NO. 1
		6	3	03-69	409	
MANNVILLE	–	3	1	01-76	27	EAST CANTUAR UNIT NO. 2
		1	–	–	–	
BELLY RIVER	PERIPHERAL	9	1	10-70	444	EAST DOLLARD VOLUNTARY UNIT
BELLY RIVER	LINE DRIVE	16	14	06-56	4248	FOSTERTON MAIN UNIT
BELLY RIVER	–	–	–	03-57	–	FOSTERTON N.W. UNIT
–	–	6	2	03-70	271	
BELLY RIVER	PERIPHERAL & MOD. 9-SPOT	7	4	06-70	247	GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1
SURFACE WATER	–	23	3	06-56	1276	GULL LAKE NORTH SHAUNAVON POOL UNIT
–	–	6	–	–	–	GULL LAKE SOUTH VOLUNTARY UNIT NO. 1

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	DOME	UPPER SHAUNAVON	5-1-72	–	WATERFLOOD
HATTON GAS UNIT	SPC	MEDICINE HAT	5-1-59	–	–
HAZLET UNIT	CENERGY	ROSERAY	8-1-66	–	WATERFLOOD
ILLERBRUN VOLUNTARY UNIT	DOME	UPPER SHAUNAVON	11-1-66	5-1-67	WATERFLOOD
INSTOW UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-59	–	WATERFLOOD
INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	5-1-85	–	WATERFLOOD
JOHNSTON UNIT	DOME	BASAL CANTUAR UPPER SHAUNAVON	1-1-63	–	WATERFLOOD (BASAL CANTUAR)
LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	SUNCOR	SHAUNAVON	1-1-68	–	WATERFLOOD
NORTH PREMIER UNIT NO. 1	MOBIL	ROSERAY & UPPER SHAUNAVON	10-1-64	–	WATERFLOOD (ROSERAY)
NORTH PREMIER UNIT NO. 2	MOBIL	PREMIER SAND	7-1-66	–	WATERFLOOD
NORTH PREMIER VOLUNTARY UNIT NO. 4	MOBIL	ROSERAY & UPPER SHAUNAVON	9-1-80	–	WATERFLOOD
NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT	SUNCOR	UPPER SHAUNAVON	11-1-72	–	WATERFLOOD
NORTH RAPDANUPPER SHAUNAVON VOLUNTARY UNIT	ESSO RESOURCES	UPPER SHAUNAVON	2-1-68	5-1-68	WATERFLOOD
RAPDAN UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-57	7-1-65	WATERFLOOD
RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	4-1-74	–	WATERFLOOD
SOUTHWEST SUCCESS VOLUNTARY UNIT	ATCOR	ROSERAY & CANTUAR	4-1-83	–	–
SUCCESS UNIT	MOBIL	ROSERAY & FOSTERTON	12-1-57	–	WATERFLOOD
SUCCESS ALPHA UNIT	MOBIL	ROSERAY	7-1-60	–	WATERFLOOD
SUCCESS MAIN UNIT	MOBIL	CANTUAR, ROSERAY & FOSTERTON	9-1-62	–	WATERFLOOD (ROSERAY)
SUCCESS NORTH ROSERAY VOLUNTARY UNIT	TRI LINK	ROSERAY	4-1-84	–	WATERFLOOD
SUFFIELD UNIT NO. 1	MOBIL	ROSERAY	7-1-66	4-1-72	WATERFLOOD
SUFFIELD UNIT NO. 2	MOBIL	UPPER SHAUNAVON	9-1-70	–	WATERFLOOD
SUFFIELD UNIT NO. 3	MOBIL	ROSERAY & UPPER SHAUNAVON	6-1-71	4-1-72	WATERFLOOD
VERLO ROSERAY SAND UNIT	MOBIL	ROSERAY	9-1-70	10-1-7	WATERFLOOD
WEST FOSTERTON VOLUNTARY UNIT	TEXACO	ROSERAY	3-1-67	–	WATERFLOOD
AREA IV					
ALAMEDA CENTRAL UNIT	GULF	MIDALE	12-1-62	8-1-69	WATERFLOOD
ALAMEDA EAST UNIT	DOME	MIDALE	8-1-62	9-1-65	WATERFLOOD
ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1	ARGYLL	MIDALE	12-1-84		WATERFLOOD
ALIDA UNIT	MOBIL	ALIDA	12-1-57	–	–
ANTLER VOLUNTARY UNIT NO. 1	SADELLE	MIDALE	11-1-71	–	WATERFLOOD
BENSON UNIT	SHELL	MIDALE	2-1-65	9-1-67	WATERFLOOD
BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1	DOME	MIDALE	11-1-67	6-1-68	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	ACTIVE WELLS 12/87 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	UNIT NAME
BELLY RIVER	–	4	1	05-72	108	GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1
–	–	102	–	–	–	HATTON GAS UNIT
MANNVILLE	PERIPHERAL	3	1	07-70	674	HAZLET UNIT
BELLY RIVER	–	4	3	04-66	855	ILLERBRUN VOLUNTARY UNIT
BELLY RIVER & RAVENSCRAG	PERIPHERAL	51	21	12-57	4468	INSTOW UNIT
BELLY RIVER	–	10	2	12-85	81	INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT
SURFACE WATER	–	2	1	03-63	51	JOHNSTON UNIT
–	–	1	–	–	–	
BELLY RIVER	–	6	3	07-64	16	LEITCHVILLE SHAUNAVON VOLUNTARY UNIT
MANNVILLE	–	5	2	07-64	1366	NORTH PREMIER UNIT NO. 1
MANNVILLE	–	1	1	06-67	68	NORTH PREMIER UNIT NO. 2
MANNVILLE	PERIPHERAL	14	5	02-65	3614	NORTH PREMIER VOLUNTARY UNIT NO. 4
	–	15	1	12-80	59	
MANNVILLE	–	7	2	02-73	34	NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	–	6	1	07-68	5	NORTH RAPDANUPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	48	20	11-62	941	RAPDAN UNIT
BELLY RIVER	PARTIAL 5-SPOT	4	1	04-74	42	RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2
–	–	10	1	10-80	122	SOUTHWEST SUCCESS VOLUNTARY UNIT
		1	–			
MANNVILLE	PERIPHERAL	24	4	08-58	2652	SUCCESS UNIT
MANNVILLE	–	5	1	09-60	410	SUCCESS ALPHA UNIT
MANNVILLE	PERIPHERAL	13	5	09-56	1299	SUCCESS MAIN UNIT
MANNVILLE	PERIPHERAL	12	1	06-82	298	SUCCESS NORTH ROSERAY VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	10	2	05-66	893	SUFFIELD UNIT NO. 1
BELLY RIVER	–	13	3	07-70	615	SUFFIELD UNIT NO. 2
BELLY RIVER	PERIPHERAL	11	4	06-70	1151	SUFFIELD UNIT NO. 3
		4	1		60	
MANNVILLE	–	14	6	06-65	4912	VERLO ROSERAY SAND UNIT
BELLY RIVER	–	8	2	04-67	546	WEST FOSTERTON VOLUNTARY UNIT
						AREA IV
MANNVILLE	INV. 9-SPOT	14	5	03-60	98	ALAMEDA CENTRAL UNIT
MANNVILLE	INV. 9-SPOT	31	18	12-62	294	ALAMEDA EAST UNIT
MANNVILLE	PERIPHERAL	4	3	12-84	23	ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1
–	–	44	–	–	–	ALIDA UNIT
MANNVILLE	–	3	1	11-68	19	ANTLER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	48	14	11-64	226	BENSON UNIT
MANNVILLE	INV. 9-SPOT	14	4	11-67	158	BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1	SASKOIL	FROBISHER-ALIDA	1-1-72	–	–
CARNDUFF SOUTH MIDALE VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	MIDALE	1-1-85	–	WATERFLOOD
CARNDUFF VOLUNTARY UNIT NO. 1	SCEPTRE	MIDALE	12-1-70	–	WATERFLOOD
CULLEN UNIT	NORCEN	MIDALE	10-1-65	5-1-66	–
DOUGLASTON-FROBISHER BEDS UNIT	DOME	FROBISHER	6-1-64	–	–
DOUGLASTON-MIDALE BEDS UNIT	DOME	MIDALE	6-1-64	10-1-67	WATERFLOOD
EAST CARNDUFF UNIT	GULF	MIDALE	5-1-62	11-1-65	WATERFLOOD
ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	FROBISHER	12-1-69	–	WATERFLOOD
FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	PANCANADIAN	RATCLIFFE	8-1-68	9-1-69	WATERFLOOD
FLETWODE ALIDA VOLUNTARY UNIT	CANOXY	ALIDA	10-1-68	–	–
GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	BERRY	FROBISHER-ALIDA	11-1-72	–	WATERFLOOD (FROBISHER)
GLEN EWEN UNIT	SCEPTRE	MIDALE	4-1-63	–	WATERFLOOD
HASTINGS FROBISHER UNIT	SASKOIL	FROBISHER	7-1-71	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	1-1-70	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2	ESSO RESOURCES	FROBISHER	10-1-70	–	WATERFLOOD
HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1	DOME	BIRDBEAR	12-1-68	–	–
HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	DOME	RATCLIFFE	12-1-68	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1	TEXACO	MIDALE	2-1-74	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	12-1-87	–	WATERFLOOD
INGOLDSBY MISSION CANYON VOLUNTARY UNIT	ESSO RESOURCES	ALIDA	9-1-66	–	–
KENOSEE TILSTON BEDS VOLUNTARY UNIT	ENCOR ENERGY	TILSTON	9-1-89	–	–
KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1	DAG RESOURCES	UPPER HASTINGS	4-1-74	–	–
LAKE ALMA VOLUNTARY UNIT	PANCANADIAN	RATCLIFFE	4-1-89	–	WATERFLOOD
LAMPMAN UNIT	GULF	MIDALE	3-1-64	10-1-67	WATERFLOOD
LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	1-1-71	–	–
MIDALE UNIT	SHELL	MIDALE	8-1-62	9-1-67	WATERFLOOD
MIDALE SOUTH VOLUNTARY UNIT NO. 1	COMAPLEX	MIDALE	7-1-87	–	WATERFLOOD
NORTH ALAMEDA UNIT	GULF	MIDALE	5-1-63	–	WATERFLOOD
NORTH CANTAL UNIT	ESSO RESOURCES	ALIDA	1-1-66	4-1-69	–
NORTH CENTRAL WILLMAR VOLUNTARY UNIT	ENCOR ENERGY	FROBISHER-ALIDA	3-1-76	–	WATERFLOOD
NORTH DALESBORO UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	12-1-70	–	WATERFLOOD
NORTHGATE MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	1-1-84	–	WATERFLOOD
NORTHWEST BENSON MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	2-1-85	–	WATERFLOOD
NOTTINGHAM NORTH ALIDA BEDS UNIT	MOBIL	ALIDA	10-1-60	–	–
OUNGRE VOLUNTARY UNIT NO. 1	SUNCOR	OUNGRE	1-1-68	12-1-69	WATERFLOOD
QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT	GULF	KISBEY SAND	7-1-89	–	–
RALPH MIDALE BEDS VOLUNTARY UNIT	MIDALE	MIDALE	10-1-87	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	UNIT NAME
–	–	3	–	–	–	CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1
PRODUCED WATER	INV. 9-SPOT	16	4	08-85	96	CARNDUFF SOUTH MIDALE VOLUNTARY UNIT
RAVENSCRAG	–	8	1	05-71	20	CARNDUFF VOLUNTARY UNIT NO. 1
–	–	6	–	–	–	CULLEN UNIT
–	–	4	–	–	–	DOUGLASTON-FROBISHER BEDS UNIT
MANNVILLE	LINE DRIVE	12	8	06-64	366	DOUGLASTON-MIDALE BEDS UNIT
MANNVILLE	INV. 9-SPOT	108	19	07-62	1133	EAST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	26	3	11-70	155	ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	28	8	10-68	546	FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
–	–	4	–	–	–	FLETWODE ALIDA VOLUNTARY UNIT
PRODUCED WATER	–	6	1	08-73	92	GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	38	6	10-63	232	GLEN EWEN UNIT
MANNVILLE	INV. 9-SPOT	10	1	10-67	138	HASTINGS FROBISHER UNIT
MANNVILLE	PERIPHERAL	32	5	11-66	330	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT & PERIPHERAL	18	3	11-66	233	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2
–	–	3	–	–	–	HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1
MANNVILLE	–	9	2	12-67	263	HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	17	5	09-74	47	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	5	1	12-87	10	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2
–	–	36	–	–	–	INGOLDSBY MISSION CANYON VOLUNTARY UNIT
–	–	27	–	–	–	KENOSEE TILSTON BEDS VOLUNTARY UNIT
–	–	10	–	–	–	KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1
MANNVILLE	–	6	4	06-70	236	LAKE ALMA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	9	3	04-64	76	LAMPMAN UNIT
–	–	27	–	–	–	LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1
MANNVILLE	INV. 9-SPOT	346	78	06-60	5112	MIDALE UNIT
MANNVILLE	PERIPHERAL	6	1	08-87	31	MIDALE SOUTH VOLUNTARY UNIT NO. 1
MANNVILLE	PERIPHERAL	7	3	12-59	49	NORTH ALAMEDA UNIT
–	–	13	–	–	–	NORTH CANTAL UNIT
MANNVILLE	INV. 9-SPOT	7	1	11-76	21	NORTH CENTRAL WILLMAR VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	9	2	02-71	203	NORTH DALESBORO UNIT NO. 1
MANNVILLE	INV. 9-SPOT	16	1	07-84	6	NORTHGATE MIDALE VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	6	1	09-85	15	NORTHWEST BENSON MIDALE VOLUNTARY UNIT
–	–	25	–	–	–	NOTTINGHAM NORTH ALIDA BEDS UNIT
MANNVILLE	INV. 9-SPOT	43	12	12-66	410	OUNGRE VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	18	3	10-87	93	RALPH MIDALE BEDS VOLUNTARY UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.	ESSO RESOURCES	FROBISHER-ALIDA	3-1-69	7-1-71	–
SOUTH ALAMEDA UNIT	SUNCOR	MIDALE	10-1-65	–	WATERFLOOD
SOUTH PINTO UNIT	DOME	MIDALE	2-1-65	10-1-66	WATERFLOOD
STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	10-1-70	–	–
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1	CYMRIC	MIDALE	5-1-83	–	WATERFLOOD
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	CYMRIC	MIDALE	10-1-85	–	WATERFLOOD
STEELMAN UNIT NO. IA	ESSO RESOURCES	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. II	ESSO RESOURCE	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. III	GULF	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. IV	GULF	MIDALE	7-1-61	4-1-62	WATERFLOOD
STEELMAN UNIT NO. V	SUNCOR	MIDALE	7-1-61	7-1-65	WATERFLOOD
STEELMAN UNIT NO. VI	GULF	MIDALE	7-1-61	9-1-68	WATERFLOOD
STEELMAN UNIT NO. VII	SUNCOR	MIDALE	6-1-62	–	WATERFLOOD
VIEWFIELD VOLUNTARY UNIT NO.1	COMAPLEX	FROBISHER	5-1-74	–	WATERFLOOD
WEST CARNDUFF UNIT	ESSO RESOURCES	MIDALE	1-1-61	5-1-62	WATERFLOOD
WEYBURN UNIT	PANCANADIAN	MIDALE	7-1-63	3-1-71	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	9-1-67	–	WATERFLOOD
WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1	SCEPTRE	FROBISHER-ALIDA	1-1-68	–	WATERFLOOD
WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	FROBISHER	4-1-67	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 1	SADELLE	MIDALE	4-1-68	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 2	SCURRY-RAINBOW	MIDALE	9-1-68	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	UNIT NAME
–	–	32	–	–	–	ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.
MANNVILLE	INV. 9-SPOT	14	5	02-63	88	SOUTH ALAMEDA UNIT
MANNVILLE	PERIPHERAL	21	11	02-65	457	SOUTH PINTO UNIT
–	–	8	–	–	–	STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	12	3	09-63	821	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	11	2	12-66	140	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	98	38	09-58	1028	STEELMAN UNIT NO. IA
MANNVILLE	INV. 9-SPOT	60	5	02-62	1633	STEELMAN UNIT NO. II
MANNVILLE	INV. 9-SPOT	64	19	01-62	1782	STEELMAN UNIT NO. III
MANNVILLE	INV. 9-SPOT	97	33	02-62	1494	STEELMAN UNIT NO. IV
MANNVILLE	INV. 9-SPOT	32	19	02-62	385	STEELMAN UNIT NO. V
MANNVILLE	INV. 9-SPOT	102	41	02-62	3035	STEELMAN UNIT NO. VI
MANNVILLE	INV. 9-SPOT	12	3	10-62	94	STEELMAN UNIT NO. VII
PRODUCED WATER	PERIPHERAL	8	0	11-86	0	VIEWFIELD VOLUNTARY UNIT NO.1
MANNVILLE	INV. 9-SPOT	30	6	05-61	448	WEST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	581	147	04-64	12339	WEYBURN UNIT
PRODUCED WATER	INV. 9-SPOT	4	–	–	–	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	18	5	02-68	264	WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	29	10	06-67	927	WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	2	1	04-68	21	WORKMAN-MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	PERIPHERAL	5	1	09-68	76	WORKMAN-MIDALE VOLUNTARY UNIT NO. 2

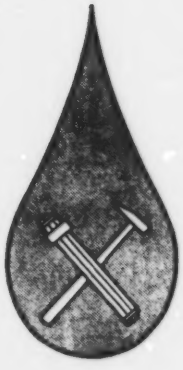
NON-UNIT – ENHANCED RECOVERY PROJECTS

POOL NAME	OPERATOR	PRODUCING ZONE	PROJECT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
CELTIC WASECA SAND	MOBIL	WASECA & G.P.	12-8-77	8-31-84	INTERMITTENT STEAM INJECTION
EYEHILL CUMMINGS SAND	MURPHY	CUMMINGS	12-8-77	5-15-84	IN-SITU COMBUSTION
GOLDEN LAKE SOUTH SPARKY SAND	HUSKY	SPARKY	11-6-68	5-31-83	IN-SITU WET COMBUSTION (SUSPENDED)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	3-19-81	6-6-84	IN-SITU WET COMBUSTION (SUSPENDED)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	2-8-82	–	IN-SITU OXYGEN WET-COMBUSTION (SUSPENDED)
LONE ROCK SPARKY SAND	TEXACO	SPARKY	10-24-83	–	STEAMFLOOD
MISCELLANEOUS LLOYDMINSTER SAND	CANTERRA	LLOYDMINSTER	2-4-74	3-31-82	CYCLIC STEAM STIMULATION (SUSPENDED)
PIKES PEAK WASECA SAND	HUSKY	WASECA	6-10-81	5-6-87	CYCLIC STEAM STIMUATION
SILVERDALE SPARKY SAND	HOME	SPARKY	6-27-84	–	WATER ALTERNATING GAS
TANGLEFLAGS G.P. SAND	HUSKY	G.P.	11-30-83	–	IN-SITU WET COMBUSTION
AREA II					
BUFFALO COULEE BAKKEN SAND	SASKOIL	BAKKEN	11-28-69	1-22-87	WATERFLOOD
BUFFALO COULEE BAKKEN SAND	PAGE	BAKKEN	11-23-79	7-31-80	WATERFLOOD
COLEVILLE BAKKEN	GEN. AMERICAN	BAKKEN	12-18-58	5-29-86	WATERFLOOD
DODSLAND VIKING SAND	EUCLA	VIKING	3-5-85	–	WATERFLOOD (SUSPENDED)
DODSLAND VIKING SAND	WESTAR	VIKING	4-1-85	–	PILOT WATERFLOOD
DODSLAND VIKING SAND	SUNCOR	VIKING	7-11-85	–	WATERFLOOD
DODSLAND VIKING SAND	CALANA	VIKING	12-4-85	–	WATERFLOOD
KERROBERT VIKING SAND	CN EXPLORATION	VIKING	12-3-85	–	PILOT WATERFLOOD
SMILEY-DEWAR VIKING	ESSO RESOURCES	VIKING	9-22-61	5-2-66	WATERFLOOD
SMILEY-DEWAR VIKING	PETRO-CANADA	VIKING	1-30-73	11-1-73	WATERFLOOD
AREA III					
BEVERLEY CANTUAR SAND	MOBIL	CANTUAR	9-29-71	–	PILOT WATERFLOOD
JAVA CANTUAR SAND	TIBER	CANTUAR	6-27-84	–	WATERFLOOD
AREA IV					
BENSON EAST MIDALE BEDS	MACEDON	MIDALE	12-2-87	–	WATERFLOOD
ELSWICK MIDALE BEDS	CAN. ROXY	MIDALE	6-10-87	–	WATERFLOOD

NON-UNIT – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/87 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/87 m^3/DAY	POOL NAME
						AREA I
SURFACE WATER	INV. 9-SPOT	22	–	10-80	–	CELTIC WASECA SAND
–	INV. 5-SPOT	4	–		–	
GLACIAL DRIFT	INV. 5-SPOT	20	9	06-80	–	EYEHILL CUMMINGS SAND
DINA SAND	INV. 7-SPOT & INV. 9-SPOT	11	0	07-68	–	GOLDEN LAKE SOUTH SPARKY SAND
PRODUCED WATER	INV. 5-SPOT	3	0	04-82	–	GOLDEN LAKE SOUTH WASECA SAND
GLACIAL DRIFT	INV. 7-SPOT	1	0	07-82	–	GOLDEN LAKE SOUTH WASECA SAND
SURFACE WATER	INV. 7-SPOT	13	3	11-84	–	LONE ROCK SPARKY SAND
SURFACE WATER	–	0	0	07-74	–	MISCELLANEOUS LLOYDMINSTER SAND
SURFACE WATER	–	66	6	07-81	–	PIKES PEAK WASECA SAND
SPARKY SAND	–	7	3	12-85	90	SILVERDALE SPARKY SAND
SURFACE WATER	INV. 7-SPOT	17	3	02-85	–	TANGLEFLAGS G.P. SAND
						AREA II
BELLY RIVER	INV. 9-SPOT	15	4	07-69	199	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	17	6	08-80	113	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT & INV. 5-SPOT	239	97	01-59	5251	COLEVILLE BAKKEN
BELLY RIVER & DEADWOOD	INV. 9-SPOT	6	0	07-85	0	DODSLAND VIKING SAND
BELLY RIVER	INV. 5-SPOT	9	0	11-85	0	DODSLAND VIKING SAND
DUPEROW	INV. 9-SPOT	33	11	03-86	14	DODSLAND VIKING SAND
BELLY RIVER & DEADWOOD	INV. 9-SPOT	35	5	10-87	258	DODSLAND VIKING SAND
DUPEROW	INV. 5-SPOT	16	9	03-86	14	KERROBERT VIKING SAND
BELLY RIVER	INV. 9-SPOT	124	22	02-62	587	SMILEY-DEWAR VIKING
BELLY RIVER	INV. 9-SPOT	32	9	03-73	43	SMILEY-DEWAR VIKING
						AREA III
BELLY RIVER	INV. 9-SPOT	8	1	10-71	28	BEVERLEY CANTUAR SAND
MANNVILLE	–	4	1	07-84	52	JAVA CANTUAR SAND
						AREA IV
MANNVILLE	INV. 9-SPOT	8	1	12-87	28	BENSON EAST MIDALE BEDS
MANNVILLE	INV. 9-SPOT	24	0	–	0	ELSWICK MIDALE BEDS

DEVELOPMENT DATA



DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
ABERFELDY SPARKY SAND	SOLUTION GAS DRIVE WATER DRIVE PART. GAS CAP DRIVE	WATERFLOOD IN: 1: ABERFELDY UNIT (SUSPENDED) 2: SOUTH ABERFELDY SPARKY VOLUNTARY UNIT (SUSPENDED) IN-SITU WET COMBUSTION IN: ABERFELDY UNIT STEAMFLOOD IN: ABERFELDY UNIT	1	SE 1/4 OF LSD, EXCEPT: A: TWP 49, RGE 28, SEC: NW 1/4 OF 4, N 1/2 OF 5, 8, 9, W 1/2 OF 10, SW 1/4 OF 15, 16, 17, E 1/2 & NW 1/4 OF 18, 20, 21, 28, 29; TWP 48, RGE 27, SEC: N 1/2 OF 35, NW 1/4 OF 36; TWP 49, RGE 27, SEC: 1, 2, 11, 12; WHERE: NW 1/4 OF LSD; B: TWP 49, RGE 27, SEC: 14, 15, NE 1/4 OF 16, E 1/2 OF 21, 22, 23, 27, 28, 33, 34; WHERE: NE 1/4 OF LSD.
			1	
			1	
ALAMEDA MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: ALAMEDA CENTRAL UNIT 2: ALAMEDA EAST UNIT 3: NORTH ALAMEDA UNIT 4: SOUTH ALAMEDA UNIT	2	ODD NUMBERED LSD.
ALAMEDA WEST FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
ALAMEDA WEST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ALAMEDA WEST VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ALIDA EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 5, RGE 33, SEC: 26, 27, 28, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34; TWP 6, RGE 33, SEC: SW 1/4 OF 3; WHERE: EVEN NUMBERED LSD.
			2	
ALIDA NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALIDA WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALSASK BASAL BLAIRMORE SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 29, RGE 29, SEC: NW 1/4 OF 10, W 1/2 OF 15, SW 1/4 OF 22; WHERE: SEE POOL REGULATIONS CONCERNING PARTIAL DRAINAGE UNITS.
ANTELOPE LAKE EAST ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
ANTELOPE LAKE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
ARCOLA FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	1	CENTRE OF LSD.
AUBURNTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
AVON HILL VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: AVON HILL VIKING VOLUNTARY UNIT	1	CENTER OF LSD.
BALDWINTON SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BATTLE CREEK MADISON	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTLE CREEK UPPER SHAUNAVON	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BATTRUM NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
BATTRUM ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	IN-SITU WET COMBUSTION IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 2 3: BATTRUM UNIT NO. 3 WATERFLOOD IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 3 3: BATTRUM UNIT NO. 4	1	CENTER OF LSD, EXCEPT: A: TWP 18, RGE 18, SEC: 30; TWP 18, RGE 17, SEC: 25, 26, E 1/2 OF 27, NE 1/4 OF 33, 34, 35, SE 1/4 & W 1/2 OF 36; WHERE: EVEN NUMBERED LSD; B: TWP 19, RGE 17, SEC: 1, S 1/2 OF 2; WHERE:
			2	ODD NUMBERED LSD.
BENCH UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BENSON EAST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
BENSON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: BENSON UNIT 2: BENSON MIDALE VOLUNTARY UNIT NO. 1 3: NORTHWEST BENSON MIDALE VOLUNTARY UNIT	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 6, RGE 8, SEC: N 1/2 OF 17, N 1/2 & SE 1/4 OF 18, 19, 20, W 1/2 OF 21, SW 1/4 OF 28, SW 1/4 OF 29, S 1/2 & NW 1/4 OF 30, W 1/2 OF 31; TWP 6, RGE 9, SEC: SW 1/4 & NE 1/4 OF 13, NW 1/4 OF 15, 16, E 1/2 & NW 1/4 OF 17, 19, 20, 21, W 1/2 &N≥ 1/4 OF 22, W 1/2 & NE 1/4 OF 23, 24 TO 29 INCLUSIVE, S 1/2 OF 30, 36; TWP 6, RGE 10, SEC: E 1/2 OF 24, SE 1/4 OF 25; WHERE:
			2	ODD NUMBERED LSD.
BEVERLEY CANTUAR SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	2	EVEN NUMBERED LSD.
BEVERLEY EAST CANTUAR SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BEVERLEY NORTH CANTUAR SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BEVERLEY UPPER ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: BEVERLEY UNIT NO. 1	1	CENTER OF LSD.
BIENFAIT MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BIG GULLY MCLAREN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE:
			1	NE 1/4 OF LSD.
BIG GULLY WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE:
			1	NE 1/4 OF LSD.
BONE CREEK UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BONE CREEK UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 11, RGE 19, SEC: W 1/2 OF 2, 3, E 1/2 OF 4; WHERE:
			2	ODD NUMBERED LSD.
BROMHEAD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BROWNING FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BRYANT FROBISHER BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BRYANT MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BUFFALO COULEE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
BUFFALO COULEE NORTH BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
BUTTE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BUTTE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
BUZZARD LLOYDMINSTER SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CACTUS LAKE BASAL MANNVILLE-BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
CANTAL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2 1	EVEN NUMBERED LSD, EXCEPT: TWP 5, RGE 33, SEC: 19, 20, 29, 30; WHERE: CENTER OF LSD.
CANTAL SOUTH FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
CANTUAR EAST CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: EAST CANTUAR UNIT NO. 1 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR EAST ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1: EAST CANTUAR UNIT NO. 1 2: EAST CANTUAR UNIT NO. 2 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR LOWER ROSERAY SAND	WATER DRIVE	NONE	1	SW 1/4 OF LSD.
CANTUAR MAIN CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: CANTUAR UNIT	1	SW 1/4 OF LSD.
CANTUAR NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CARNDUFF FROBISHER BEDS	WATER DRIVE	NONE	2 2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: W 1/2 OF 5, 6; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 9, 10, 11, W 1/2 OF 12, W 1/2 OF 14, 15, 16; WHERE: EVEN NUMBERED LSD.
CARNDUFF MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEST CARNDUFF UNIT 2: EAST CARNDUFF UNIT 3: CARNDUFF VOLUNTARY UNIT NO. 1 4: CARNDUFF SOUTH MIDALE VOLUNTARY UNIT	2 2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: NE 1/4 & W 1/2 OF 4, 5, 6, 7, 8, 9, 16, 17, S 1/2 OF 18; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 11, 12, S 1/2 OF 13; WHERE: EVEN NUMBERED LSD.
CELTIC G.P. SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.
CELTIC MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC WASECA SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
CHAMBERY UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
CLARILAW FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CLARILAW WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
CLINTONVILLE SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
COLEVILLE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
COLEVILLE MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
COLEVILLE SOUTH BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COLEVILLE SOUTH MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COSINE LAKE LLOYDMINSTER SAND	GAS CAP DRIVE	NONE	1	SE 1/4 OF LSD. EXCEPT: TWP 37, RGE 28, SEC: LSDS 4,5,12 & 13 OF 7, LSDS 4,5,12 & 13 OF 18, LSDS 4,5,12 & 13 OF 19; TWP 37, RGE 29, SEC: LSDS 1,8,9 & 16 OF 12, LSDS 1,8,9 & 16 OF 13, LSDS 1,8,9 & 16 OF 24; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
COURT BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
COVINGTON UPPER SHAUNAVON	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: COVINGTON UNIT NO. 1	2	EVEN NUMBERED LSD.
COVINGTON WEST UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
CRYSTAL HILL SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
DALESBORO FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
DEE VALLEY EAST MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DELTA UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DELTA UNIT NO. 1 2: DELTA UNIT NO. 2 3: DELTA VOL. UNIT NO. 3	2	EVEN NUMBERED LSD.
DODSLAND VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: EAGLE LAKE VIKING VOLUNTARY UNIT 2: EAST DODSLAND VIKING VOLUNTARY UNIT 3: GLENEATH SOUTH VIKING VOLUNTARY UNIT 4: GLENEATH UNIT 5: KIYIU LAKE VIKING VOLUNTARY UNIT 6: KIYIU LAKE VIKING VOLUNTARY UNIT NO. 2 7: NORTH DODSLAND VIKING VOLUNTARY UNIT	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
DOLLARD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DOLLARD UNIT 2: EAST DOLLARD VOLUNTARY UNIT	2	ODD NUMBERED LSD, EXCEPT: TWP 7, RGE 19, SEC: N 1/2 OF 8, W 1/2 OF 16, 17, E 1/2 OF 18; TWP 7, RGE 20, SEC: S 1/2 OF 10, NE 1/4 OF 19, SW 1/4 OF 20, NW 1/4 OF 27, N 1/2 OF 28, SE 1/4 OF 30; WHERE:
			4	NW LSD OF 1/4 SECTION.
DRUID MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
DULWICH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	EACH QUADRANT OF LSD.
DULWICH NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTH DULWICH VOLUNTARY UNIT (SUSPENDED)	1/2	NE & SW 1/4 OF LSD.
EAR LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EASTBROOK UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
EASTEND SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 19, SEC: 5, 6, 7, 8, W 1/2 OF 18; TWP 6, RGE 20, SEC: E 1/2 OF 1; WHERE:
			4	NW LSD IN 1/4 SECTION.
EDAM WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WEST SPARKY/G.P. SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDAM WEST MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDAM WEST WASECA SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDENVALE TILSTON BEDS	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
ELMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ELMORE MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ELSWICK MIDALE BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
EPPING G.P. SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH EPPING UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: A: TWP 47, RGE 27, SEC: S 1/2 & NW 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 28, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 28, SEC: S 1/2 OF 1, S 1/2 OF 2; WHERE:
			1	NW 1/4 OF LSD; B: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, S 1/2 & NW 1/4 OF 29, 30; WHERE:
			1/2	NW & SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
EPPING SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SOUTH EPPING UNIT NO. 1 2: SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, W 1/2 & SE 1/4 OF 29, 30, W 1/2 & SE 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 28, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 28, SEC: S 1/2 OF 1, S 1/2 OF 2, SE 1/4 OF 3; WHERE:
			1/2	NW & SE 1/4 OF LSD.
EUREKA VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH EUREKA UNIT 2: SOUTH EUREKA UNIT	1	CENTER OF LSD.
EVESHAM NORTH MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EYEHILL CUMMINGS SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	PILOT IN-SITU DRY COMBUSTION	1	CENTER OF LSD.
FERTILE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FERTILE TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FLAT LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	4	SW LSD IN 1/4 SECTION, EXCEPT: TWP 1, RGE 16, SEC: S 1/2 OF 1, S 1/2 OF 2, S 1/2 OF 3, S 1/2 OF 5, S 1/2 OF 6; WHERE: WELLS LOCATED A MINIMUM DISTANCE OF 1600 FEET FROM U.S. BORDER.
FLORENCE FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
FOREST BANK MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: A: TWP 48, RGE 24, SEC: 32; TWP 49, RGE 24, SEC: 6; WHERE:
			1	SE 1/4 OF LSD; B: TWP 49, RGE 24, SEC: 7, 18; TWP 49, RGE 25, SEC: 12, 13; WHERE:
			1	NE 1/4 OF LSD.
FOREST BANK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.
FOREST BANK WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.
FORGAN VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
FOSTERTON ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: FOSTERTON MAIN UNIT 2: FOSTERTON NORTHWEST UNIT (SUSPENDED) 3: WEST FOSTERTON VOLUNTARY UNIT	1	SW 1/4 OF LSD, EXCEPT: TWP 17, RGE 18, SEC: 4, E 1/2 OF 5, E 1/2 OF 8, 9, LSDS 1,2,3,4,8,9 & 16 OF 16, LSDS 1 & 2 OF 17; WHERE:
		IN-SITU WET COMBUSTION IN: FOSTERTON NORTHWEST UNIT	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
FOSTERTON SOUTH CANTUAR SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FOSTERTON SOUTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FREDA LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
FREEMONT SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREEMONT WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREESTONE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 6, SEC: W 1/2 OF 7, W 1/2 OF 17, 18,19, W 1/2 OF 20; TWP 9, RGE 7, SEC: 11, 12, 13; WHERE: 1 CENTER OF LSD.
FRYS EAST TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FRYS TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FURNESS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
FUSILIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	1	CENTER OF LSD.
GAINSBOROUGH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	2	ODD NUMBERED LSD.
GLEN EWEN FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
GLEN EWEN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GLEN EWEN UNIT	2	ODD NUMBERED LSD, EXCEPT: A: TWP 2, RGE 1, SEC: N 1/2 OF 26, 32, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34, SE 1/4 OF 35; TWP 3, RGE 1, SEC: NW 1/4 OF 8, N 1/2 OF 10, N 1/2 OF 11, NE 1/4 OF 12, S 1/2 OF 13, W 1/2 OF 15, SE 1/4 OF 16, W 1/2 & NE 1/4 OF 20, W 1/2 OF 22; WHERE: 4 SE LSD OF 1/4 SECTION; B: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
GOLDEN LAKE NORTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 19, 29, 30, E 1/2 & SW 1/4 OF 31, 32; TWP 48, RGE 24, SEC: NE 1/4 OF 24, SE 1/4 OF 25; WHERE: 1 SW 1/4 OF LSD.
GOLDEN LAKE NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.
GOLDEN LAKE NORTH WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
GOLDEN LAKE SOUTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH SPARKY SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH WASECA SAND	SOLUTION GAS DRIVE	TWO IN-SITU WET COMBUSTION PILOT PROJECTS-OXYGEN ENRICHED	1	SE 1/4 OF LSD.
GRIFFIN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
GULL LAKE BASAL CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: JOHNSTON UNIT 2: GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
GULL LAKE CENTRAL UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	2	SE 1/4 OF EVEN LSD.
GULL LAKE NORTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE NORTH SHAUNAVON UNIT	1	SE 1/4 OF LSD.
GULL LAKE SOUTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	4 4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 12, RGE 19, SEC: NE 1/4 OF 21, 22, 23, N 1/2 & SW 1/4 OF 24, SW 1/4 OF 26, S 1/2 OF 27, SE 1/4 OF 28; WHERE: NE LSD OF 1/4 SECTION.
GULLY LAKE WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GULLY LAKE WASECA VOLUNTARY UNIT	1	SE 1/4 OF LSD.
HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HARTAVEN FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HASTINGS EAST FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HASTINGS FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: 1: HASTINGS FROBISHER UNIT 2: HASTINGS VOLUNTARY UNIT NO. 1 3: HASTINGS VOLUNTARY UNIT NO. 2	2

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
HAZELWOOD TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HAZLET ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: HAZLET UNIT	2	EVEN NUMBERED LSD.
HEARTS HILL BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
HOFFER RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: A: TWP 1, RGE 15, SEC: 28, 29, S 1/2 OF 32, S 1/2 OF 33; WHERE:
			4	SW LSD OF 1/4 SECTION; B: TWP 1, RGE 15, SEC: 30; TWP 1, RGE 16, SEC: E 1/2 OF 25; WHERE:
			2	ODD NUMBERED LSD.
HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: HOOSIER BAKKEN SAND VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
HUME FROBISHER BEDS	WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
HUME MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 12, SEC: 31, W 1/2 OF 32; TWP 8, RGE 12, SEC: N 1/2 OF 3, SE 1/4 OF 4, S 1/2 OF 5, S 1/2 OF 6; WHERE:
			2	ODD NUMBERED LSD.
HUMMINGBIRD BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
HUNTOON FROBISHER BEDS	WATER DRIVE	NONE	4	SE LSD IN 1/4 SECTION, EXCEPT: TWP 6, RGE 9, SEC: N 1/2 OF 30, 31, 32, 33, 34; TWP 7, RGE 9, SEC: W 1/2 OF 2, 3, 4, E 1/2 OF 5, 9, 10; TWP 6, RGE 10, SEC: N 1/2 OF 25, NE 1/4 OF 26, E 1/2 OF 33, 34, 35, 36; TWP 7, RGE 10, SEC: 4; WHERE:
			2	ODD NUMBERED LSD.
HUNTOON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1 2: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	4	SE LSD IN 1/4 SECTION, EXCEPT: TWP 6, RGE 9, SEC: N 1/2 OF 30, 31, 32, 33, 34; TWP 7, RGE 9, SEC: W 1/2 OF 2, 3, 4, E 1/2 OF 5, 9, 10; TWP 6, RGE 10, SEC: N 1/2 OF 25, NE 1/4 OF 26, E 1/2 OF 33, 34, 35, 36; TWP 7, RGE 10, SEC: 4; WHERE:
			2	ODD NUMBERED LSD.
ILLERBRUN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ILLERBRUN VOLUNTARY UNIT	4	SE LSD IN 1/4 SECTION.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
INGOLDSBY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 4, RGE 31, SEC: NW 1/4 OF 6, LSDS 7,8, W 1/2 & NE 1/4 OF 7, LSDS 15,16 & NW 1/4 OF 8, N 1/2 OF 9, W 1/2 OF 16, LSDS 1 & 2 OF 18, LSDS 13 & 14 OF 22, SW 1/4 OF 27, SE 1/4 OF 28; TWP 4, RGE 32, SEC: LSDS 7 & 8 OF 12; WHERE: 1 CENTRE OF LSD.
INGOLDSBY WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
INSTOW UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: INSTOW UNIT 2: INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	2	ODD NUMBERED LSD.
JAVA CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
JOHNSTON UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
KENOSEE TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
KERROBERT VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
KISBEY BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
LAKE ALMA RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: LAKE ALMA VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
LANDROSE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE: 1/2 NE & SW 1/4 OF LSD.
LANDROSE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE: 1/2 NE & SW 1/4 OF LSD.
LASHBURN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 18; TWP 48, RGE 24, SEC: NW 1/4 OF 14, NE 1/4 OF 15, E 1/2 OF 22, 23; WHERE: 1 SE 1/4 OF LSD.
LASHBURN SOUTH WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE LASHBURN SOUTH SPARKY SAND POOL.
LASHBURN WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: LASHBURN WASECA VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD.
LASHBURN WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
LEITCHVILLE SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 8, RGE 18, SEC: N 1/2 OF 31, N 1/2 OF 32 TWP 9, RGE 18, SEC: W 1/2 OF 4, 5, 6, 7, 8, 9, W 1/2 OF 10, S 1/2 & NW 1/4 OF 16, 17, 18, S 1/2 OF 19, S 1/2 OF 20; WHERE:
			2	EVEN NUMBERED LSD.
LEON LAKE SHAUNAVON	SOLUTION GAS DRIVE	PILOT WATERFLOOD	4	SE LSD OF 1/4 SECTION.
LIGHTNING TILSTON BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
LLOYDMINSTER SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD, EXCEPT: SPECIAL PROVISIONS FOR PARTIAL LSD.
LONE ROCK SPARKY SAND	SOLUTION GAS DRIVE	PILOT STEAMFLOOD	1/4	CENTER OF EACH 1/4 LSD.
LOST HORSE HILL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 8, SEC: LSDS 5,6,7,8,11,12 & NE 1/4 OF 32, LSDS 13,14,15, & 16 OF 33; TWP 10, RGE 8, SEC: LSDS 5,6 & NW 1/4 OF 3, LSDS 11, 12 & S 1/2 & NE 1/4 OF 4, LSDS 3 & 4 OF 10, 11, 12, SW 1/4 OF 13, S 1/2 OF 14, SE 1/4 OF 15; WHERE:
			1	CENTER OF LSD.
LOUGHEED MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 6, RGE 14, SEC: N 1/2 OF 20, 29, 32; WHERE:
			2	EVEN NUMBERED LSD.
LOVERNA DETRITAL	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
LOW LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LUCKY HILLS VIKING	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	2	EVEN NUMBERED LSD.
LUSELAND BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MACKLIN SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
MACOUN MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MACOUN WEST MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MAIDSTONE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIDSTONE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIN SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS MAIN UNIT	1	SW 1/4 OF LSD.
MANITO LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MARSDEN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
MARSDEN SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
MELROSE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
MIDALE CENTRAL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
MIDALE CENTRAL MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: MIDALE UNIT 2: MIDALE SOUTH VOLUNTARY UNIT NO. 1 PILOT CARBON DIOXIDE FLOOD IN: MIDALE UNIT	2	ODD NUMBERED LSD.
MINARD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MOOSE MOUNTAIN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MOOSE VALLEY TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
MORRISVIEW FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NEILBURG MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NEPTUNE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	CENTER OF 1/4 SECTION.
NORTH ANTLER MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTLER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
NORTHGATE FROBISHER BEDS	WATER DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
NORTHGATE MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHGATE MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
NORTH HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NORTH HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	1	CENTER OF LSD.
NORTH HOOSIER BASAL BLAIRMORE	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	1/2	SW & NE 1/4 OF LSD.
NORTHMINSTER SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHMINSTER SPARKY VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD, EXCEPT: TWP 50, RGE 27, SEC: NW 1/4 OF 2, 11, LSDS 12,13,14,15 & 16 OF 12, S 1/2 & NW 1/4 OF 13, 14, N 1/2 OF 19, NW 1/4 OF 20, W 1/2 OF 29, 30, 31; TWP 50, RGE 28, SEC: E 1/2 OF 36; WHERE:
			1	SE 1/4 OF LSD.
NORTHMINSTER NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTHMINSTER NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTH PREMIER ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UNIT NO. 1 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD.
NORTH PREMIER UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD, EXCEPT: TWP 14, RGE 19, SEC: 26, E 1/2 OF 27, 34, 35; WHERE:
			2	SW 1/4 OF ODD LSD.
NORTH SMILEY BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NOTOKEU UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
NOTTINGHAM ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OAKLEY FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OUNGRE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: OUNGRE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
PARKMAN SOURIS VALLEY BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN SOUTH TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PENNANT UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
PIKES PEAK G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK WASECA SAND	SOLUTION GAS DRIVE	CYCLIC STEAM STIMULATION	1	SE 1/4 OF LSD.
PINTO FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PINTO MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH PINTO UNIT	2	EVEN NUMBERED LSD.
PLATO NORTH VIKING	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
PLATO VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: PLATO VIKING VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
PLOVER LAKE BAKKEN SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD (SUSPENDED)	1	CENTER OF LSD.
PRAIRIEDALE VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
QUEENSDALE EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE WEST ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
RALPH MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: RALPH MIDALE BEDS VOL. UNIT	2	ODD NUMBERED LSD.
RAPDAN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: RAPDAN UNIT 2: NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT 3: RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2 PILOT POLYMER FLOOD IN: RAPDAN UNIT	2 4 4	EVEN NUMBERED LSD, EXCEPT: A: TWP 3, RGE 20, SEC: NE 1/4 OF 32, NW 1/4 OF 33; TWP 4, RGE 20, SEC: W 1/2 OF 4, E 1/2 OF 5, E 1/2 OF 8, W 1/2 OF 9, SW 1/4 OF 16, SE 1/4 OF 17; WHERE: NE LSD IN 1/4 SECTION; B: TWP 4, RGE 19, SEC: E 1/2 & NW 1/4 OF 30, 31, 32; TWP 4, RGE 20, SEC: 26, 35, S 1/2 & NE 1/4 OF 36; TWP 5, RGE 19, SEC: 5, W 1/2 & NE 1/4 OF 7, 8; TWP 5, RGE 20, SEC: W 1/2 OF 1, 2, 12; WHERE: SW LSD IN 1/4 SECTION.
RAPDAN WEST SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
RED JACKET GRAVELBOURG	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RED JACKET SHAUNAVON-GRAVELBOURG	WATER DRIVE	NONE	1	CENTER OF LSD.
ROCANVILLE BAKKEN SAND	PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
RONCOTT BAKKEN SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ROSEBANK ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 4, RGE 32, SEC: LSDS 15,16 & NW 1/4 OF 26, LSDS 7, 8 & NE 1/4 OF 29, LSDS 1 & 2 OF 32, 33, LSDS 13 & 14 OF 34; TWP 5, RGE 32, CES: W 1/2 & NE 1/4 OF 3, E 1/2 & SW 1/4 OF 4, SW 1/4 OF 10; WHERE: 1 CENTER OF LSD; B: TWP 5, RGE 32, SEC: NE 1/4 OF 5; WHERE: 4 CENTER OF DRAINAGE UNIT.
ROSEBANK SOUTH ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RUSH LAKE MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SALT LAKE LLOYDMINSTER SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SENLAC LLOYDMINSTER SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SHERWOOD FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 1, RGE 31, SEC: LSDS 1,2,3 & 4 OF 6, TWP 1, RGE 32, SEC: LSDS 1,2,3 & 4 OF 1, LSDS 1,2,3 & 4 OF 2; WHERE: 1 CENTRE OF LSD.
SILVERDALE SPARKY SAND	SOLUTION GAS DRIVE	PILOT WATER ALTERNATING GAS INJECTION	1/4	CENTER OF EACH 1/4 LSD, EXCEPT: A: TWP 49, RGE 28, SEC: LSDS 3,6,11,14 & E 1/2 OF 14, LSDS 3,6,11,14 & SE 1/4 OF 23; WHERE: 1 CENTRE OF LSD; B: TWP 49, RGE 27, SEC: N 1/2 OF 6; TWP 48, RGE 28, SEC: LSDS 4,5,12 & 13 OF 14, LSDS 1,8,9 & 16 OF 15, LSDS 1,8,9 & 16 OF 22, LSDS 4,5,12 & 13 OF 23, LSDS 1,8,9 & 16 OF 27, LSDS 1,8, 9 & 16 OF 34; TWP 49, RGE 28, SEC: LSDS 1,8,9, & 16 OF 3, LSDS 1,8,9 & 16 OF 10, LSDS 1,8,9 & 16 OF 15; WHERE: SPECIAL PROVISIONS FOR PARTIAL SECTIONS.
SILVERTON FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
SKINNER LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
SMILEY-DEWAR VIKING	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
SOURIS FLAT FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
SOUTH FLETWODE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
SOUTH SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: SUCCESS UNIT	1	SW 1/4 OF LSD.
STANDARD HILL WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
STAR VALLEY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
STEELMAN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STEELMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: STEELMAN UNIT NO. 1A 2: STEELMAN UNIT NO. 2 3: STEELMAN UNIT NO. 3 4: STEELMAN UNIT NO. 4 5: STEELMAN UNIT NO. 5 6: STEELMAN UNIT NO. 6 7: STEELMAN UNIT NO. 7 8: LAMPMAN UNIT 9: DOUGLASTON MIDALE BEDS UNIT 10: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1 11: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	2	ODD NUMBERED LSD.
STORTHOAKS ALIDA-TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
STOUGHTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STOUGHTON SOUTH FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SUCCESS NORTH ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS NORTH ROSERAY VOLUNTARY UNIT	1	CENTER OF LSD.
SUCCESS ROSERAY SAND ALPHA	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS ALPHA UNIT	1	SW 1/4 OF LSD.
SUFFIELD ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 1 2: SUFFIELD UNIT NO. 3	2 1	ODD NUMBERED LSD, EXCEPT: TWP 14, RGE 19, SEC: 17, E 1/2 & NW 1/4 OF 18, S 1/2 OF 19, S 1/2 OF 20; WHERE: CENTER OF LSD.
SUFFIELD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 2 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD.
TANGLEFLAGS EAST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS G.P. SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION	1	SE 1/4 OF LSD.
TANGLEFLAGS LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: TANGLEFLAGS VOLUNTARY UNIT NO. 2	1	SE 1/4 OF LSD.
TANGLEFLAGS MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH CUMMINGS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
TANGLEFLAGS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TATAGWA MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
TATAGWA NORTH MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
VERLO ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: VERLO ROSERAY SAND UNIT	2	EVEN NUMBERED LSD.
VIEWFIELD FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: VIEWFIELD VOL. UNIT NO. 1	1	CENTER OF LSD.
VIEW HILL MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAPELLA SAND	WATER DRIVE	NONE	1	CENTER OF LSD.
WARMLEY ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAUCHOPE ALIDA-TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WAUCHOPE NORTH TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WEIR HILL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST KINGSFORD MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WESTHAZEL G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WESTHAZEL SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WEYBURN FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 11, SEC: W 1/2 OF 31; TWP 7, RGE 11, SEC: 5, 6, 7, 8; TWP 5, RGE 12, SEC: NW 1/4 OF 35; TWP 6, RGE 12, SEC: LSDS 13 & 14 OF 1, NE 1/4 & W 1/2 & LSDS 7 & 8 OF 2, 11, W 1/2 OF 12, 13, 14, NE 1/4 OF 22, 23, 24, 25, 26, 27, 33, 34, 35, 36; TWP 7, RGE 12, SEC: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, W 1/2 OF 14, 15, 16, 17, 18, 19, 20, 21, 22, W 1/2 OF 23; TWP 7, RGE 13, SEC: E 1/2 OF 1, E 1/2 OF 12, E 1/2 OF 13, E 1/2 OF 24; TWP 6, RGE 14, SEC: 26, 33; TWP 7, RGE 14, SEC: N 1/2 OF 2, 3, 4, 10, 11, W 1/2 OF 12; WHERE:
			2	ODD NUMBERED LSD.
WEYBURN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEYBURN UNIT 2: WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2 3: WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 5	2	EVEN NUMBERED LSD, EXCEPT: SEE: WEYBURN FROBISHER BEDS.
WHITE BEAR TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
WHITE BEAR TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITEMUD UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
WHITESIDE VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: WHITESIDE VIKING VOLUNTARY UNIT	1	CENTER OF LSD.
WILDWOOD ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
WILLMAR FROBISHER-ALIDA BEDS	WATER DRIVE SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: 1: WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1 2: NORTH DALESBORO UNIT NO. 1 3: NORTH CENTRAL WILLMAR VOLUNTARY UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 5, RGE 2, SEC: W 1/2 & NE 1/4 OF 31; TWP 6, RGE 2, SEC: 6, S 1/2 & NE 1/4 OF 7, SW 1/4 OF 8; TWP 5, RGE 3, SEC: NE 1/4 OF 25, 35, 36; TWP 6, RGE 3, SEC: 1, S 1/2 & NE 1/4 OF 2, SE 1/4 OF 12; WHERE: CENTER OF LSD.
WINMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WINTER CUMMINGS SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
WORKMAN FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: WORKMAN FROBISHER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
WORKMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WORKMAN MIDALE VOLUNTARY UNIT NO. 1 2: WORKMAN MIDALE VOLUNTARY UNIT NO. 2	2	ODD NUMBERED LSD.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1,1988.

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
BAYHURST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BAYHURST WEST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL WEST MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEVERLEY EAST CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BIGSTICK SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BROCK VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BROCK EAST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BURSTALL MEDICINE HAT SAND GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL MILK RIVER-MEDICINE HAT GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL NORTH VIKING SAND GAS	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CAVALIER SPINNEY HILL SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
COLEVILLE-SMILEY VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DODSLAND NORTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT NORTH MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GLIDDEN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GREENAN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GULL LAKE CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
HATTON MEDICINE HAT SAND GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER-MEDICINE HAT GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
JOSIER VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LIEBENTHAL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 25, SEC: 1 TO 4, 9 TO 16, 21 TO 28, & 33 TO 36; TWP 20, RGE 25, SEC: 1 TO 4; WHERE: CENTRE OF DRAINAGE UNIT.
LLOYDMINSTER COLONY SAND GAS POOL	1/4	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA NORTH MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
MARENGO VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
MILTON VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
PIERCELAND MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
SENATE SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS MCLAREN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS ST. WALBURG SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TOTNES VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST VIKING SAND GAS POOL	1/2	NORTHWEST & SOUTHEAST 1/4 OF SECTION, EXCEPT: TWP 30, RGE 26, SEC: 18 & 19; TWP 30, RGE 27, SEC: 13; WHERE : NORTHEAST & SOUTHWEST 1/4 OF SECTION.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1, 1988.

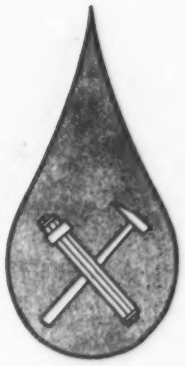
AREA SPACING DESCRIPTION*

SPACING AREA	DRAINAGE UNIT SIZE (No. of Lsds)	TARGET AREA	EXCEPTIONS
		- OIL AREAS -	
A	2	Odd numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
B	2	Even numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
C	4	Any quadrant of a quarter section.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
D	2	Odd or even Lsds.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
E	1	Southeast quadrant of the Lsd.	Wells drilled within a corridor of 1609 metres around an established oil pool shall take on the spacing of this pool. Applies only to wells drilled within the Mannville Group, Detrital, Bakken or Birdbear Formations.
		- GAS AREAS -	
G	16	Odd or even Lsds.	Wells drilled within a 9 section square area centred on a section that contains a gas well shall be drilled at least 500 metres from the sides of the drainage unit. Applies only to Mannville Formation.

* See the Oil and Gas Conservation Act & Regulations Thereunder for complete area spacing regulations.

TYPICAL WELL LOGS

OF PRODUCING ZONES



LITHOLOGY LEGEND

Silt

Shale

Sandstone

Limestone

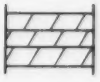
Calcareous shale

Argillaceous sandstone

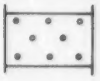
Coal

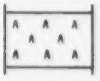
Chert pebbles

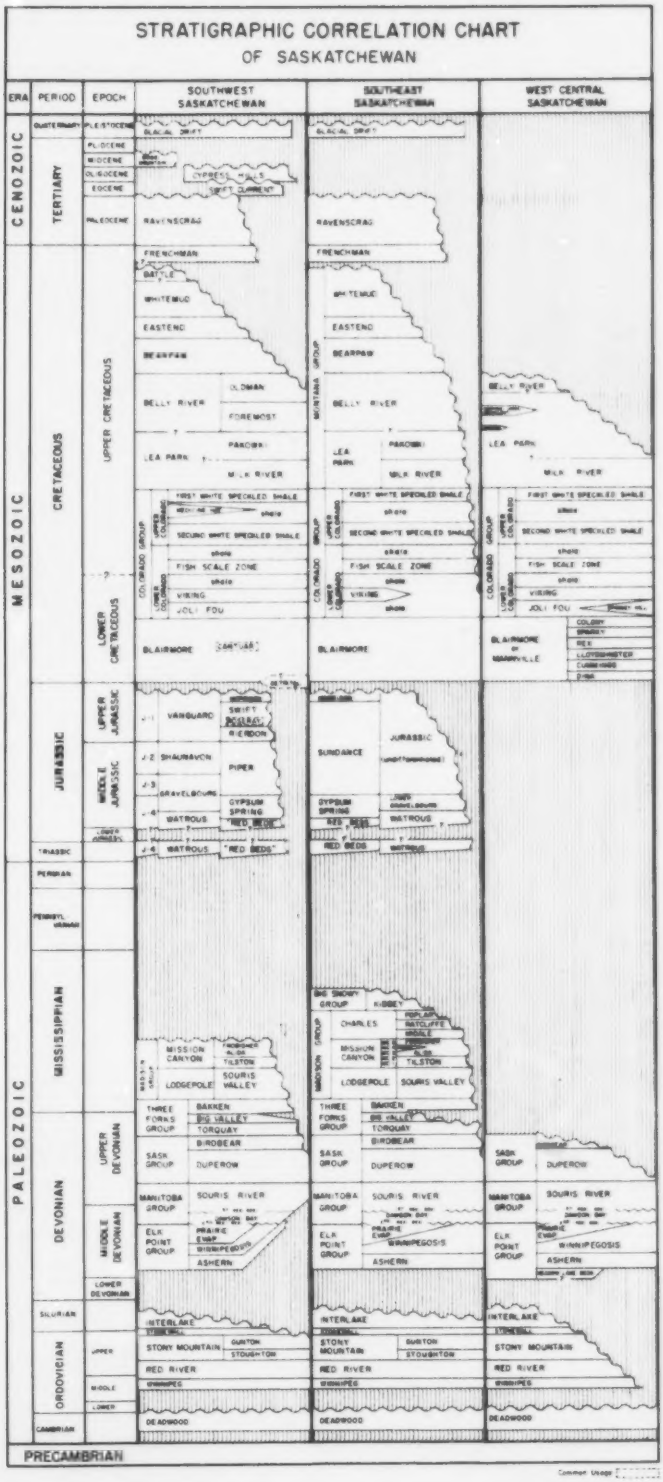
Interbedded shale and sandstone

Dolomite or dolomitic limestone 

Argillaceous and anhydritic dolomite

Oolitic 

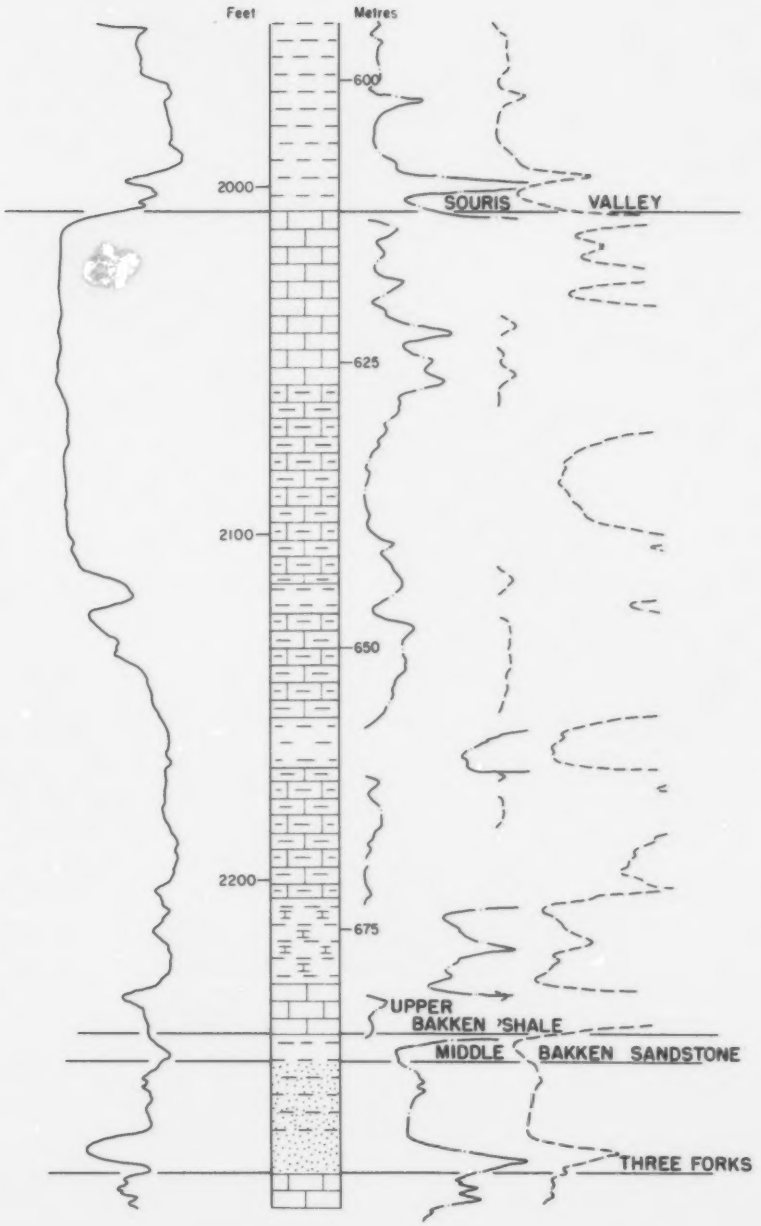
Anhydrite 


STRATIGRAPHIC CORRELATION CHART
OF SASKATCHEWAN
ERA
PERIOD
EPOCH
SOUTHWEST SASKATCHEWAN
SOUTHEAST SASKATCHEWAN
WEST CENTRAL SASKATCHEWAN
CENOZOIC
MESOZOIC
PALEOZOIC
PRECAMBRIAN
QUATERNARY
PLEISTOCENE
TERTIARY
PLIOCENE
MIOCENE
OLIGOCENE
EOCENE
PALEOCENE
CRETACEOUS
UPPER CRETACEOUS
LOWER CRETACEOUS
JURASSIC
UPPER JURASSIC
MIDDLE JURASSIC
LOWER JURASSIC
TRIASSIC
PERMIAN
PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
UPPER DEVONIAN
MIDDLE DEVONIAN
LOWER DEVONIAN
SILURIAN
ORDOVICIAN
UPPER
MIDDLE
LOWER
CAMBRIAN
GLACIAL DRIFT
CYPRESS HILLS
SWIFT CURRENT
RAVENSCRAG
FRENCHMAN
BATTLE
WHITEMUD
EASTEND
BEARPAW
BELLY RIVER
OLDMAN
FOREMOST
LEA PARK
PAKOWKI
MILK RIVER
FIRST WHITE SPECKLED SHALE
SECOND WHITE SPECKLED SHALE
FISH SCALE ZONE
VIKING
JOLI FOU
BLAIRMORE
COLORADO GROUP
UPPER COLORADO GROUP
LOWER COLORADO GROUP
VANGUARD
SWIFT
ROUND RIVER
RIVERDON
SHAUNAVON
PIPER
GRAVELBOURG
GYPSUM SPRING
WATROUS
RED BEDS
SUNDANCE
JURASSIC
MISSION CANYON
LODGEPOLE
SOURIS VALLEY
THREE FORKS GROUP
BAKKEN
BIG VALLEY
TORQUAY
BIRDBEAR
SASK GROUP
DUPEROW
MANITOBA GROUP
SOURIS RIVER
ELK POINT GROUP
PRAIRIE EVAP.
WINNIPEGOSIS
ASHERN
INTERLAKE
STONY MOUNTAIN
GUNTON
STOUGHTON
RED RIVER
WINNIPEG
DEADWOOD
BIG SNOWY GROUP
KIBBEY
CHARLES
MADISON GROUP
BIRDBEAR
TILSTON
BELLY RIVER
LEA PARK
MILK RIVER
BLAIRMORE OR KOOTENAY
COLONY
SPARKY
REX
LLOYDMINSTER
CUTBANK
2ND WHITE SPECKLED SHALE
Common Usage

HUDSON ROCANVILLE 4-4

4-4-16-31-W1

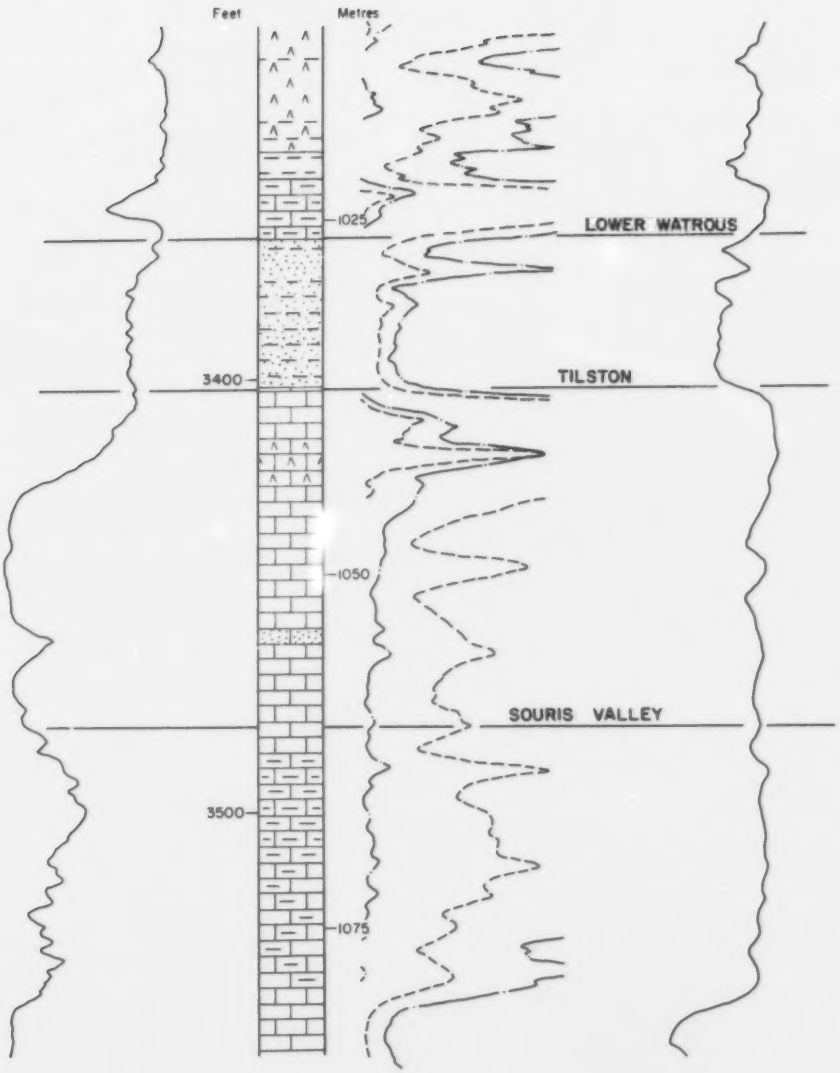
PRODUCING HORIZON : BAKKEN SAND



ROYALITE PARKMAN 2-3

2-3-9-33-W1

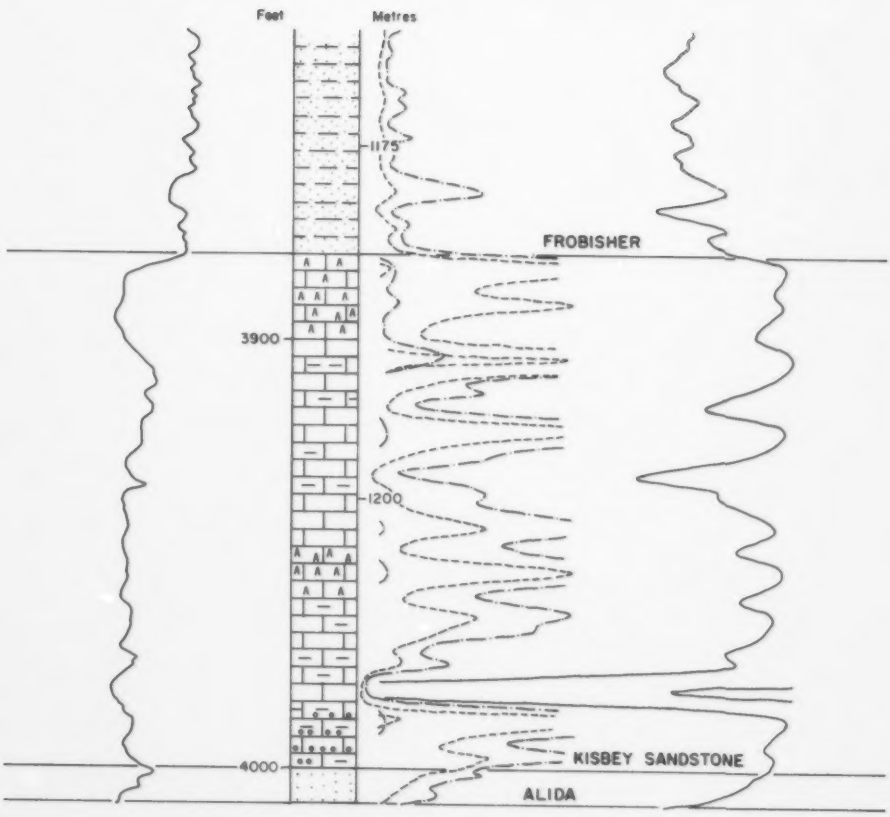
PRODUCING HORIZONS : TILSTON AND SOURIS VALLEY BEDS



MURPHY HASTINGS 7-24-4-34

7-24-4 _ -W1

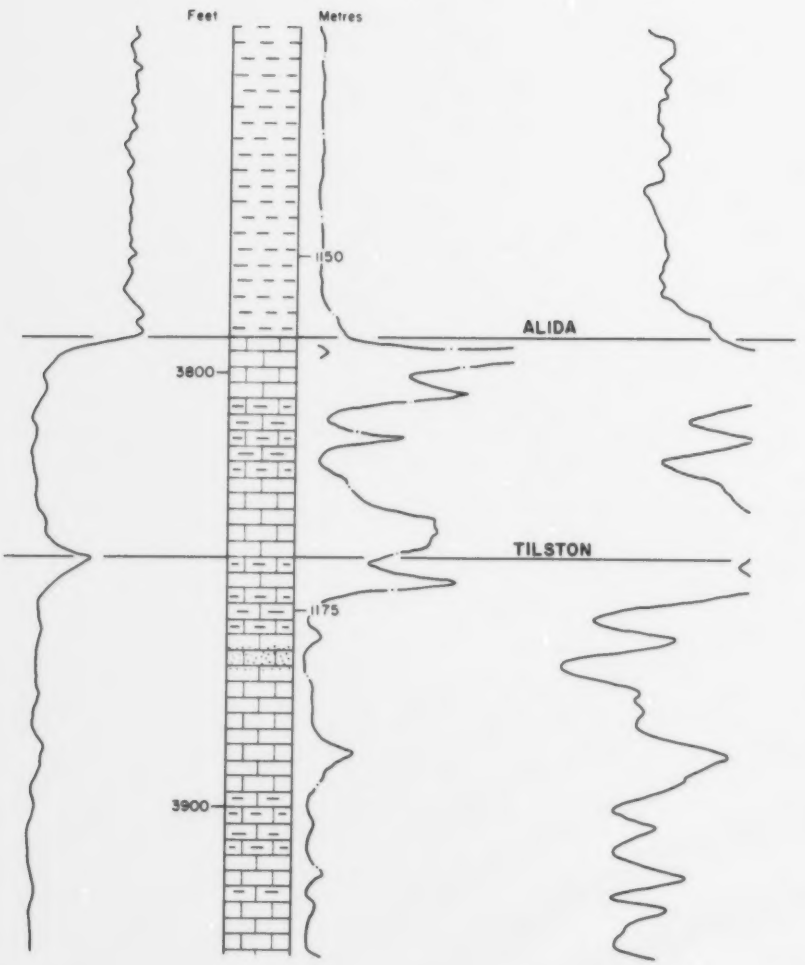
PRODUCING HORIZON : FROBISHER BEDS



SUN QUEENSDALE 2-13-6-1

2-13-6-1-W2

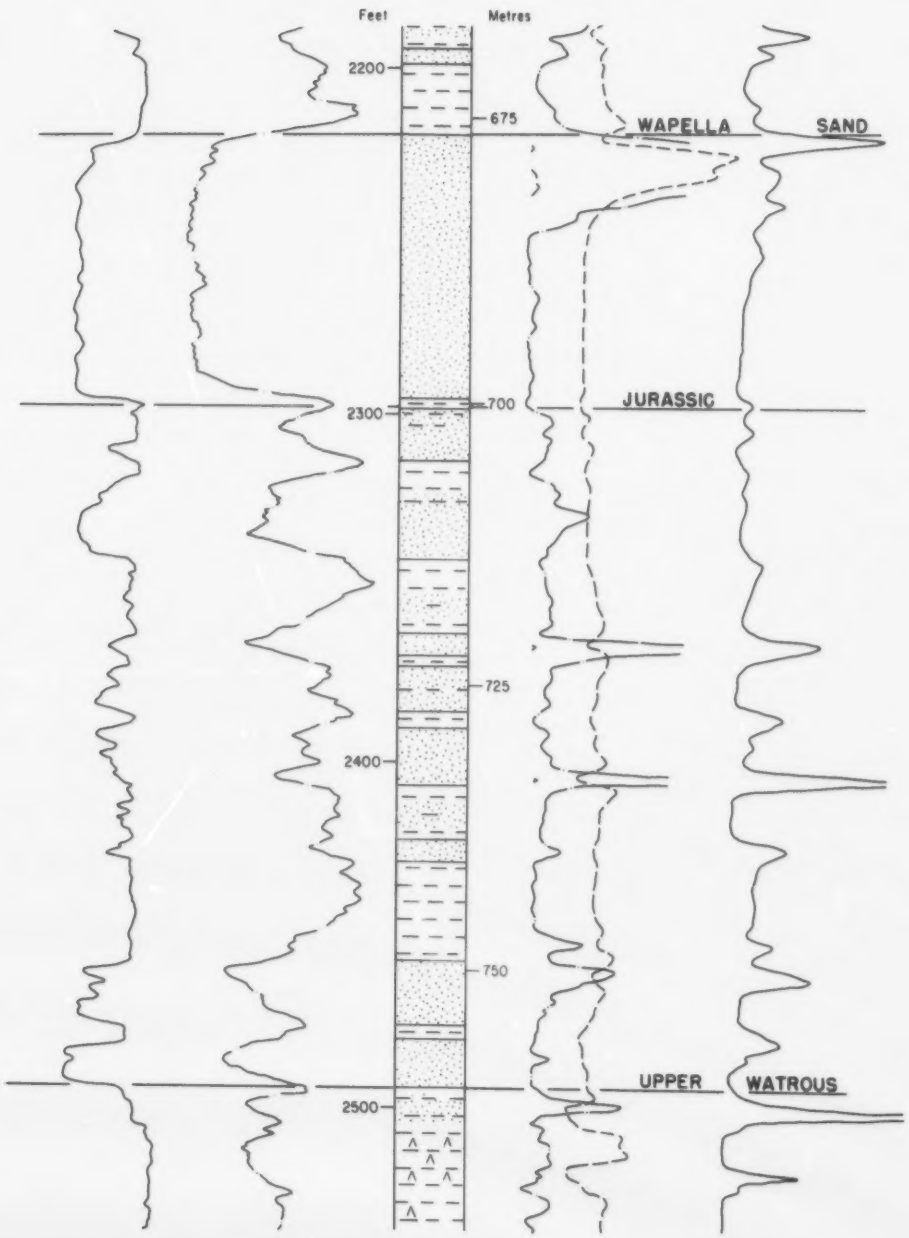
PRODUCING HORIZON : ALIDA BEDS



TIDEWATER WAPELLA 6-33

6-33-14-1-W2

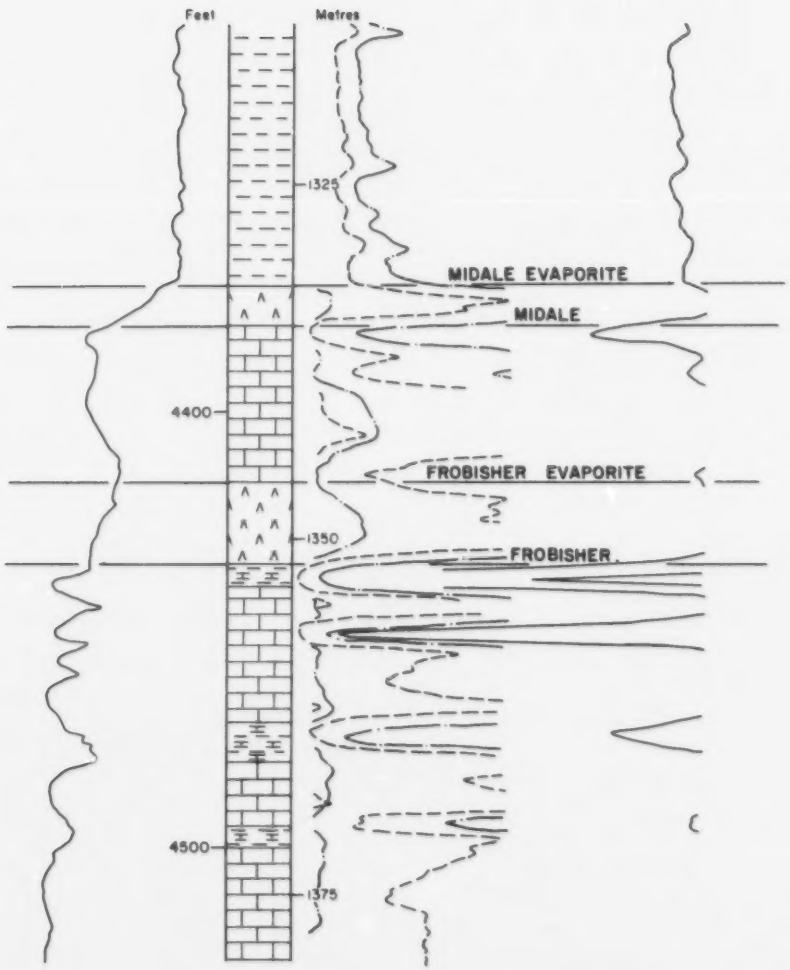
PRODUCING HORIZONS : WAPELLA AND JURASSIC SANDS



PHOENIX et al STEELMAN 5-24-5-6

5-24-5-6-W2

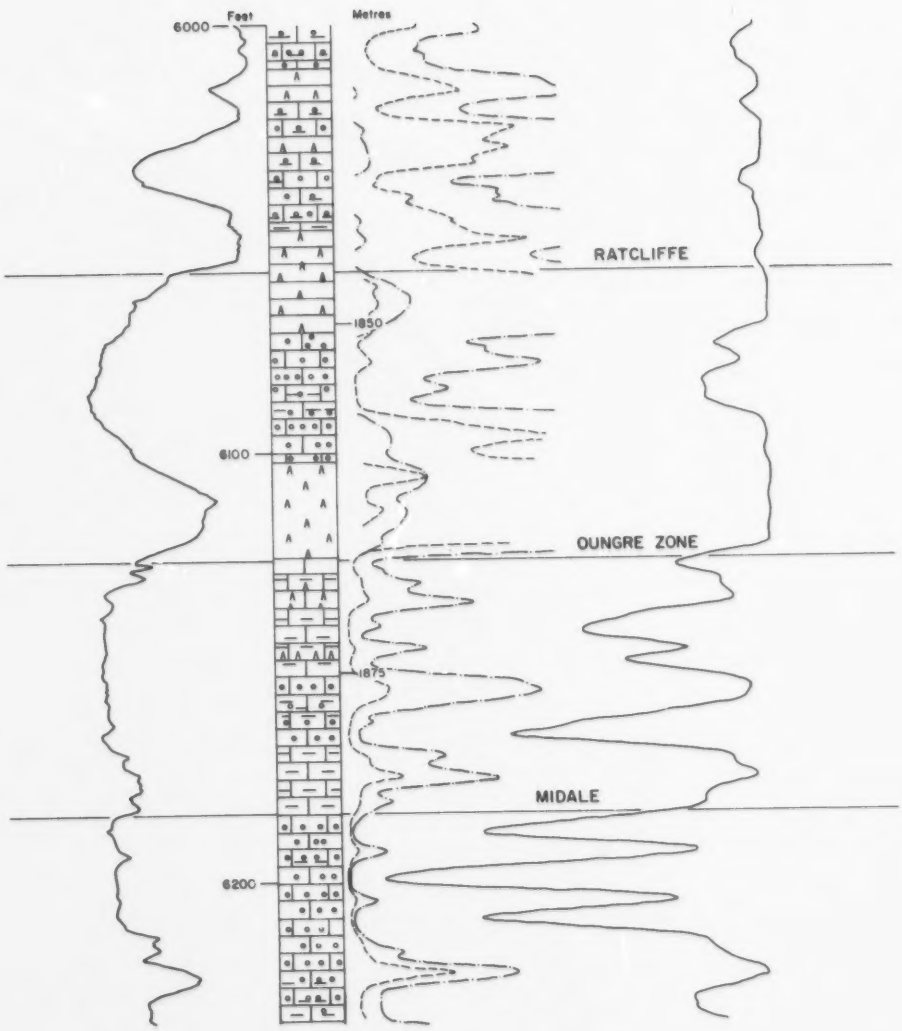
PRODUCING HORIZONS : MIDALE AND FROBISHER BEDS



CNEL CDR OUNGRE 9-24-2-15

9-24-2-15-W2

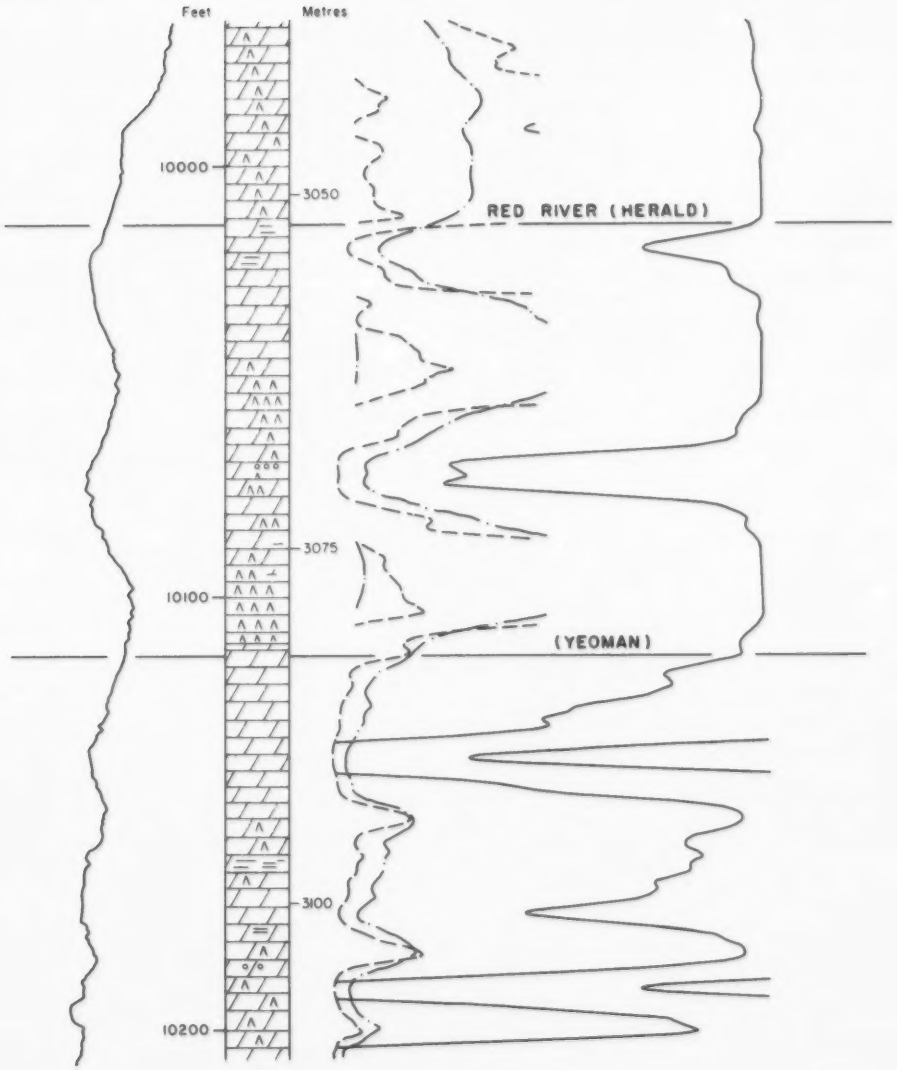
PRODUCING HORIZON : RATCLIFFE BEDS



C.D.R. S LAKE ALMA 1-14-1-17

1-14-1-17-W2

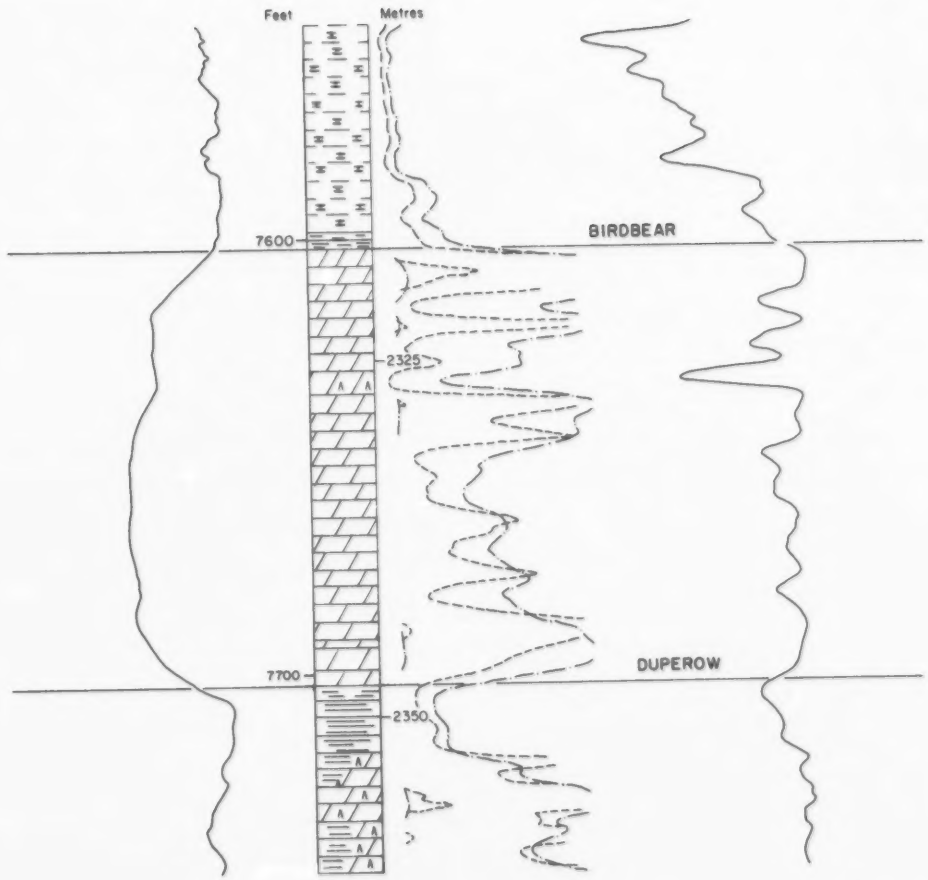
PRODUCING HORIZON : RED RIVER FORMATION



HB MIAMI HUMMINGBIRD 11-26-2-19

11-26-2-19-W2

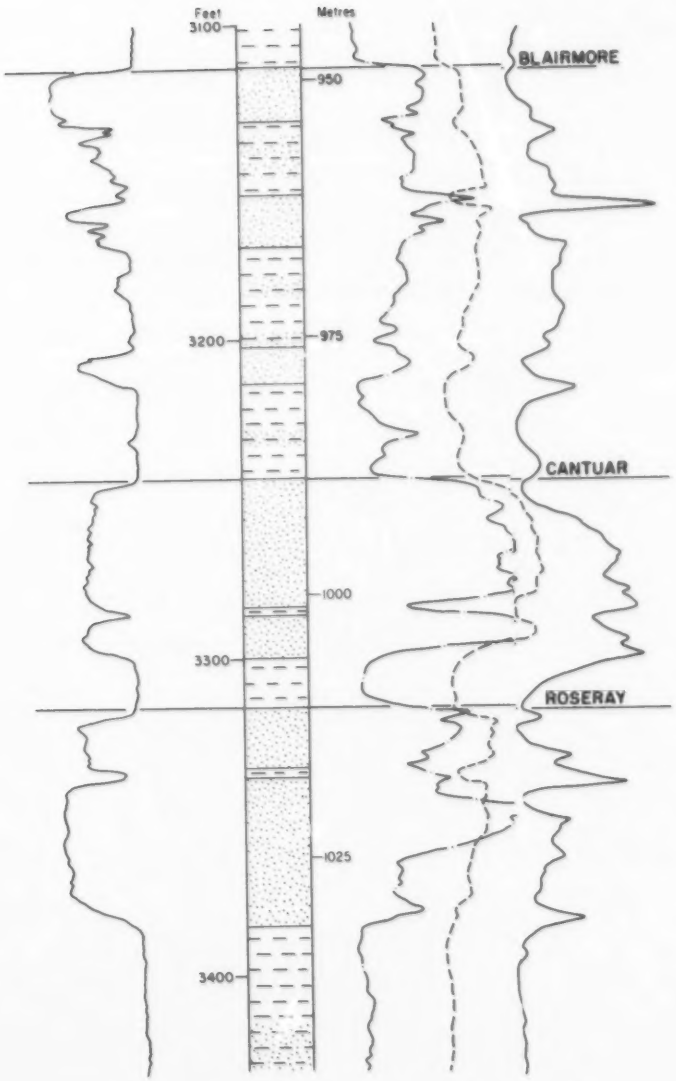
PRODUCING HORIZON : BIRDBEAR FORMATION



M.U.S. CANTUAR 5-2-16-17

5-2-16-17-W3

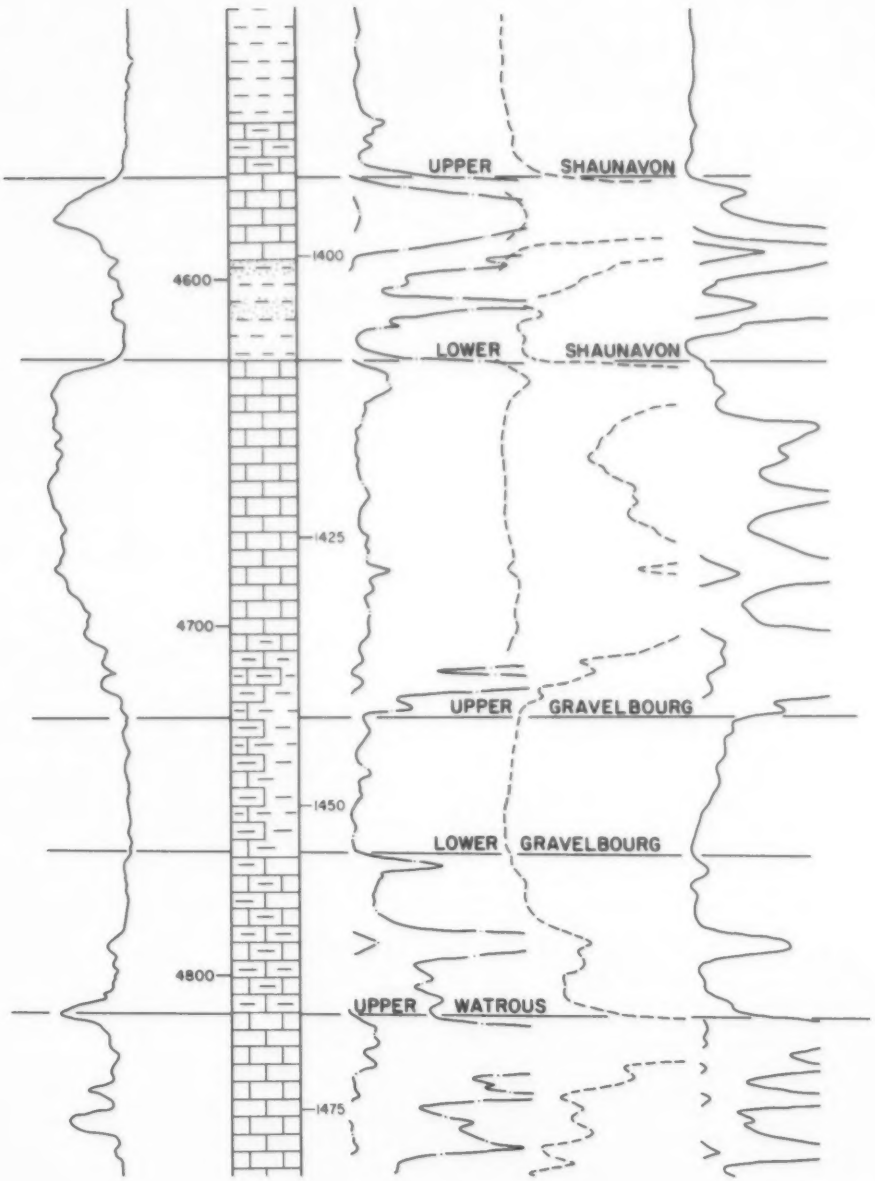
PRODUCING HORIZONS : CANTUAR AND ROSERAY SANDS



TIDEWATER INSTOW CROWN 11-33

11-33-9-18-W3

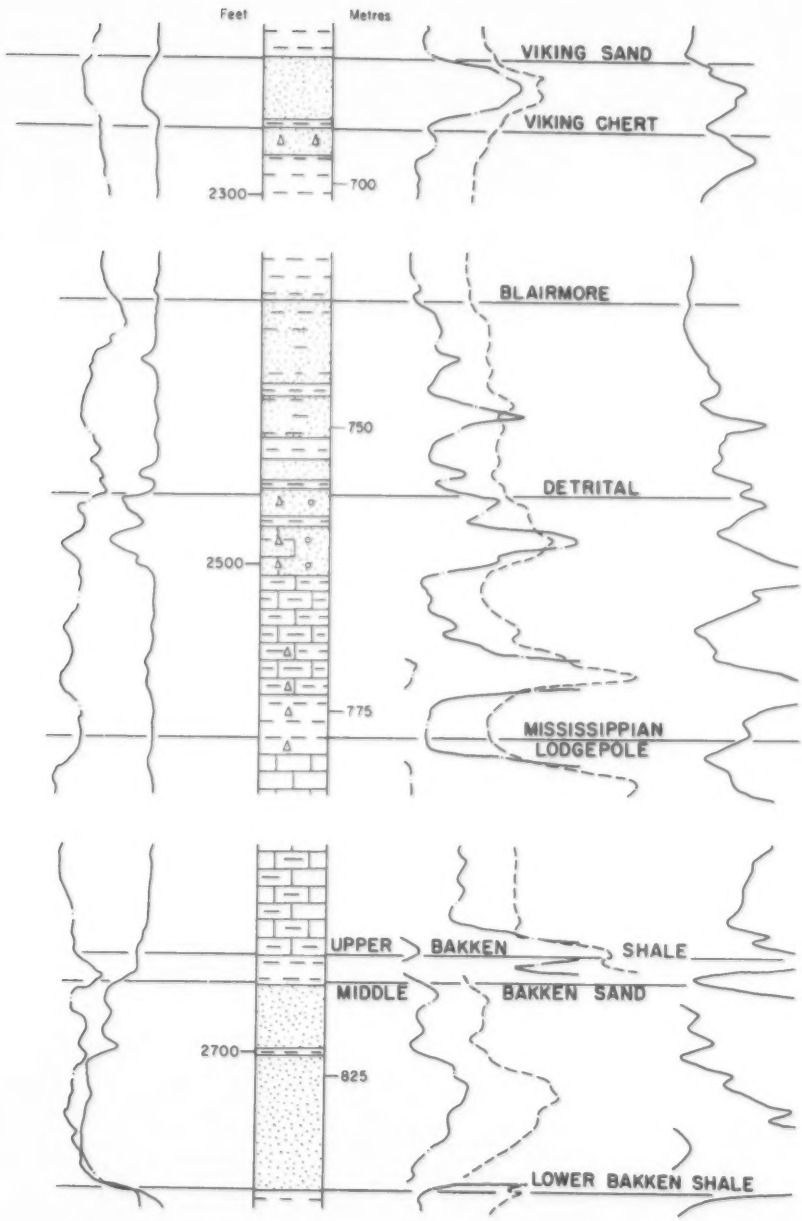
PRODUCING HORIZONS : UPPER AND LOWER SHAUNAVON FORMATIONS



COLEVILLE UNIT 5-30-31-23

5-30-31-23-W3

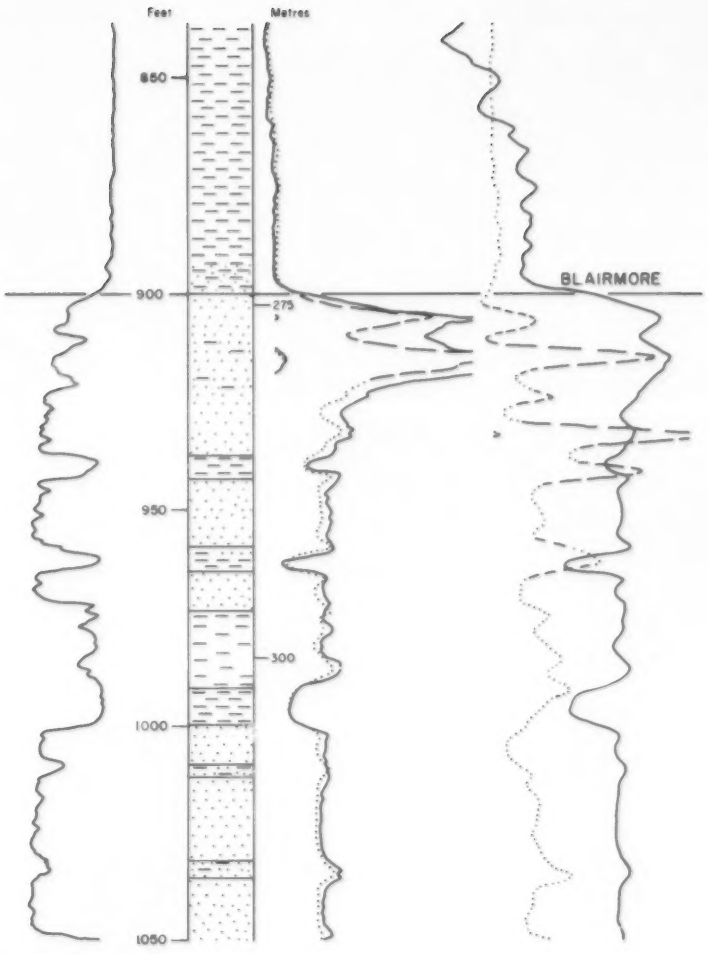
PRODUCING HORIZONS : VIKING AND MIDDLE BAKKEN SANDS



SPC BEACON HILL 10-17-61-24

10-17-61-24-W3

PRODUCING HORIZON : BLAIRMORE



PRECAM ET AL HATTON 11-21-17-25

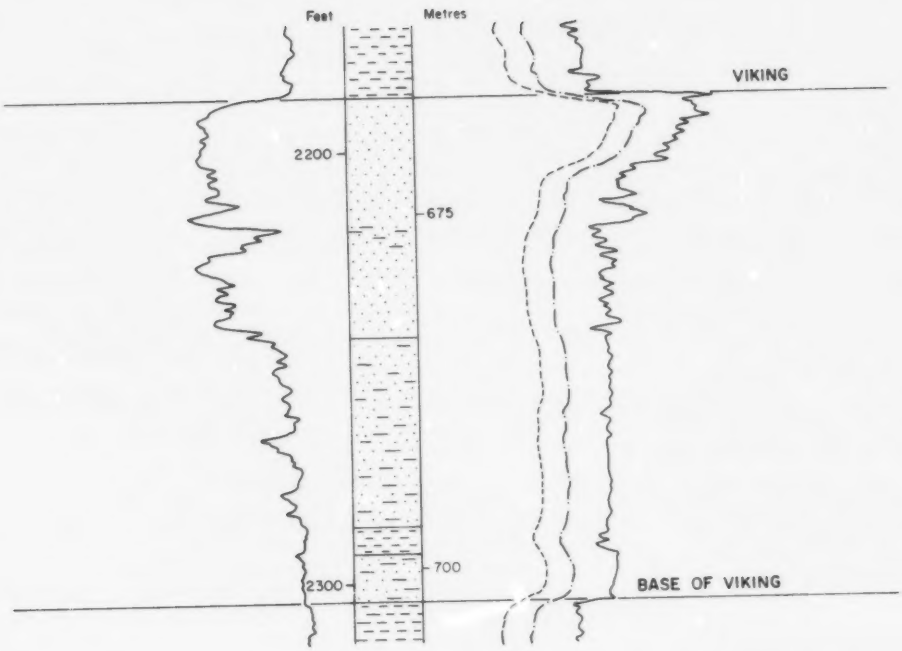
11-21-17-25w3

PRODUCING HORIZON : MILK RIVER SAND

IMP BAYHURST 11-19V-24-25

11-19-24-25-W3

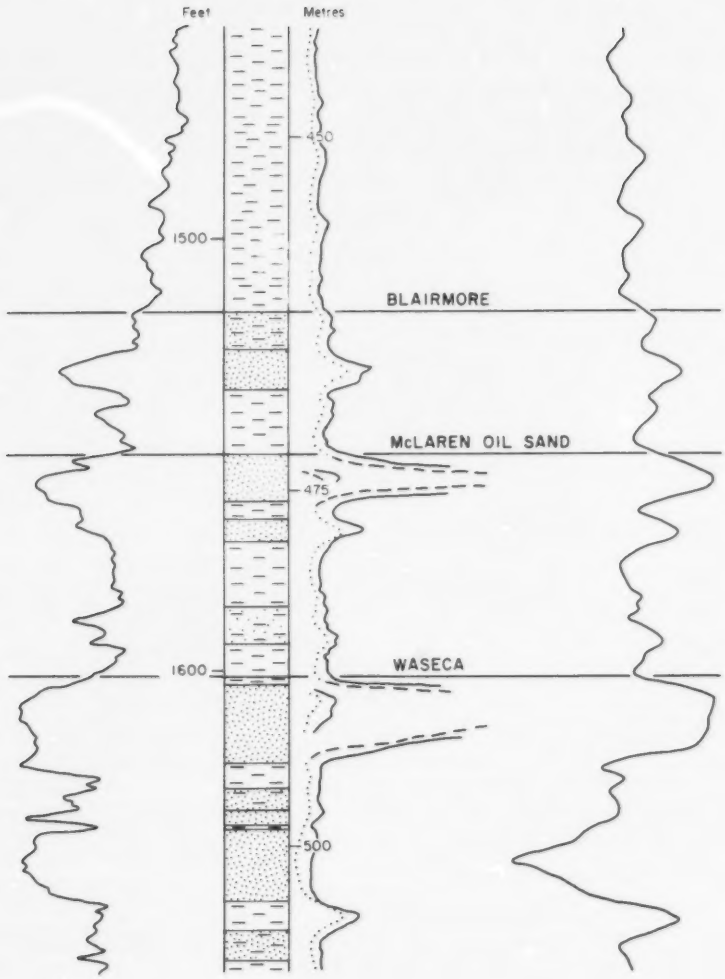
PRODUCING HORIZON : VIKING SAND



HUSKY BIG GULLY C6-27-49-25

C6-27-49-25-W3

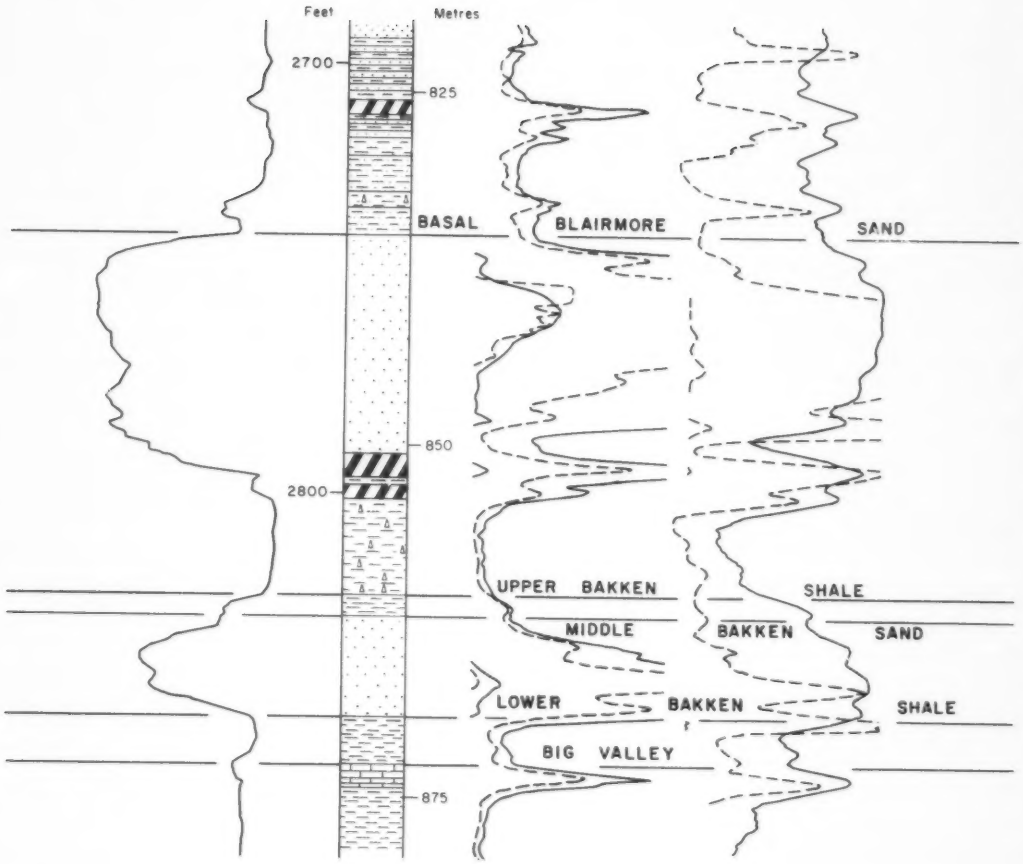
PRODUCING HORIZONS : McLAREN AND WASECA SANDS



HUSKY N. HOOSIER 6-14-32-27

6-14-32-27-W3

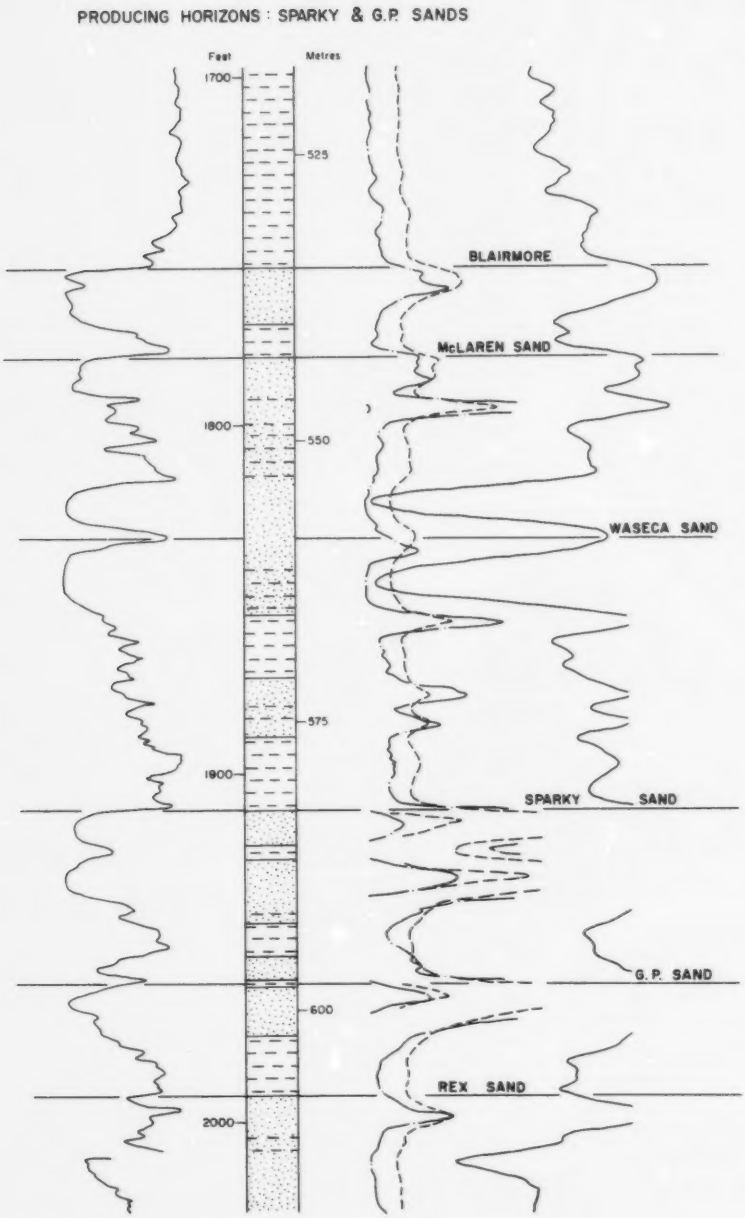
PRODUCING HORIZON : BASAL BLAIRMORE



CDN RES EPPING A14-30-47-27

14-30-47-27-W3

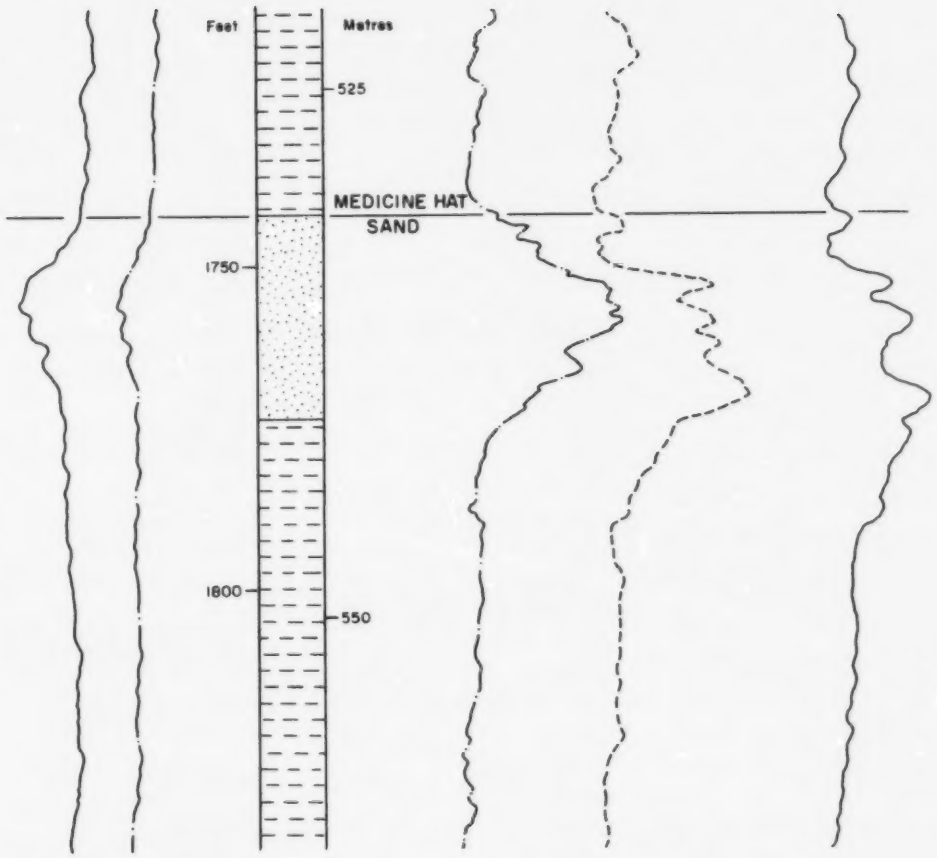
PRODUCING HORIZONS : SPARKY & G.P. SANDS



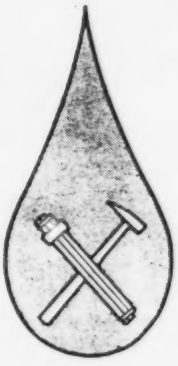
N C O HORSHAM 10-7-16-29

10-7-16-29-W3

PRODUCING HORIZON : MEDICINE HAT SAND



POOL PRESSURE DATA



INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
.berfeldy Sparky Sand	+80.8				
Alameda Midale Beds:					
(Central Group)	792.5	7.24	57	15.39	10.64 MPa @ 57°C
(East Group)	746.8	7.24	57	15.27	10.80 MPa @ 57°C
Alameda West Frobisher Beds	786.6				
Alameda West Midale Beds	765.5				
Alida East Frobisher-Alida Beds	536.4	7.67	44	10.47	10.47 MPa @ 43°C
Alida North Alida Beds	564.8				
Alida West Frobisher-Alida Beds	545.6	7.67	45	10.54	10.54 MPa @ 45°C
Alsask Basal Blairmore Sand	91.4	9.27	33		
Antelope Lake Upper Shaunavon	300.2	8.82	49	10.00	
Arcola Frobisher-Alida Beds	570.0	8.37	53	11.00	8.77 MPa @ 53°C
Auburnton Frobisher-Alida Beds	307.7				
Avon Hill Viking	13.7	8.37	23	6.72	
Baldwinton Sparky Sand	+43.7				
Battle Creek Madison	437.7				
Battle Creek Upper Shaunavon	375.7				
Battrum North Roseray Sand	172.4				
Battrum Roseray Sand	179.8	8.82	46	8.56	1.39 MPa @ 43°C
Bench Upper Shaunavon	438.9	8.82		12.45	
Benson East Midale Beds	721.2				
Benson Midale Beds	754.4	7.92	68	14.38	
Beverley Cantuar Sand	243.8	9.05	48	9.11	9.11 MPa @ 48°C
Beverley North Cantuar Sand	232.9				
Beverley Upper Roseray Sand	246.9	8.78			
Bienfait Midale Beds	1005.7				
Big Gully McLaren Sand	+141.7				
Big Gully North Lloydminster Sand	+60.9				
Big Gully Waseca Sand	+125.0				
Bone Creek Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Bromhead Midale Beds	1098.0	8.60		17.65	
Browning Frobisher-Alida Beds	682.8	7.24	59	12.55	
Bryant Frobisher Beds	836.2				
Bryant Midale Beds	807.4				
Buffalo Coulee Bakken Sand	108.2	9.66	26		2.21 MPa @ 26°C
Buffalo Coulee North Bakken Sand	93.0				
Butte Upper Shaunavon	417.6	8.82	49	12.37	1.23 MPa @ 49°C
Buzzard Lloydminster Sand	+38.4				
Cactus Lake Basal Mannville Bakken Sand	97.1				
Cantal Frobisher-Alida Beds	579.1	6.79	47	10.87	10.85 MPa @ 47°C
Cantal South Frobisher-Alida Beds	579.1				
Cantuar East Cantuar Sand	228.6	8.60	51		

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Cantuar East Roseray Sand	228.6	8.60	51		
Cantuar Lower Roseray Sand	228.6	8.78	51	9.10	9.10 MPa @ 52°C
Cantuar Main Cantuar Sand	227.1	8.78	51	8.95	8.95 MPa @ 52°C
Cantuar North Roseray Sand	238.8				
Carnduff Frobisher Beds	752.9	7.24	59	12.98	
Carnduff Midale Beds	723.9	7.24	58	15.17	
Celtic G.P. Sand	+108.5				
Celtic Sparky Sand	+118.9				
Chambery Upper Shaunavon	488.7				
Celtic Waseca Sand	+140.2				
Clarilaw Frobisher-Alida Beds	623.3	7.24	58	11.78	
Clarilaw West Frobisher-Alida Beds	619.7				
Clintonville Shaunavon	456.8				
Coleville Bakken Sand	109.7	9.50			
Coleville Mannville Sand	54.9				
Coleville South Bakken Sand	127.4				
Coleville South Mannville Sand	68.1				
Cosine Lake Lloydminster Sand	100.6				
Court Bakken Sand	129.8				
Covington Upper Shaunavon	416.1	8.82	52	11.94	3.52 MPa @ 51°C
Covington West Upper Shaunavon	417.6	8.82			
Crystal Hill Souris Valley Beds	434.3	8.37		9.19	
Dalesboro Frobisher-Alida Beds	670.6	8.37	56	12.00	
Dee Valley East Sparky Sand	+79.2				
Dee Valley East Waseca Sand	+102.1				
Dee Valley Waseca Sand	103.6				
Delta Upper Shaunavon	306.3	8.82	46	10.57	7.46 MPa @ 47°C
Dodsland Viking Sand	+4.6	7.99	23	6.41	6.41 MPa @ 23°C
Dollard Upper Shaunavon	434.3	8.60	59	11.80	6.32 MPa @ 60°C
Druid Mannville Sands	59.0				
Dulwich North Sparky Sand	+86.9				
Dulwich Sparky Sand	+79.2				
Ear Lake Waseca Sand	+12.3				
Eastbrook Upper Shaunavon	461.8	9.05	54	15.70	
Eastend Shaunavon	470.3				
Edam Waseca Sand	+119.2				
Edam West Sparky/G.P. Sand	+92.7				
Edam West Waseca Sand	+115.6				
Edenvale Tilston Beds	533.4	7.69	43		
Elmore Frobisher Beds	701.0	7.92	52	12.05	6.83 MPa @ 51°C
Elmore Midale Beds	685.8	7.69	52	14.33	
Elswick Midale Beds	948.8				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Epping G.P. Sand	+57.9				
Epping Sparky Sand	+67.1				
Eureka Viking	18.3	7.99	23	6.12	4.43 MPa @ 26°C
Evesham North McLaren Sand	+2.0				
Evesham North Sparky Sand	32.4				
Evesham Sparky Sand	33.2				
Eyehill Cummings Sand	89.9				
Fertile Tilston Beds	437.0				
Fertile Tilston-Souris Valley Beds	434.4				
Flat Lake Ratcliffe Beds	1271.0	8.37	73	20.15	9.80 MPa @ 81°C
Florence Frobisher Beds	789.4	8.37	57	13.28	
Forest Bank Mannville Sands	+115.8				
Forest Bank Sparky Sand	+99.1				
Forest Bank Waseca Sand	+120.4				
Forgan Viking Sand	9.2				
Fosterton Roseray Sand:					
Middle (II) Roseray Sand	221.0	8.82	52	9.10	
Lower (I) Roseray Sand	221.0	8.82	52	9.10	
Northwest Group	218.5	8.82	52		
Fosterton South Roseray Sand	229.6				
Freda Lake Ratcliffe Beds	960.1	8.37		18.56	
Freemont Sparky Sand	+43.8				
Freemont Waseca Sand	+62.5				
Freestone Frobisher-Alida Beds	570.0	7.92	54	11.29	
Frys East Tilston-Souris Valley Beds	395.4				
Frys Tilston-Souris Valley Beds	402.3	8.37			
Furness Sparky Sand	+73.2				
Fusilier Bakken Sand	121.9	9.27			
Gainsborough Frobisher-Alida Beds	579.1	7.24	44		
Glen Ewen Frobisher Beds	751.3	7.24	56		
Glen Ewen Midale Beds	728.5	7.24	56	15.17	
Golden Lake North Sparky Sand	+96.0				
Golden Lake North Waseca Sand	+121.9				
Golden Lake South Sparky Sand	+96.0				
Golden Lake South Waseca Sand	+115.8				
Griffin Frobisher Beds	690.4	8.60	62		
Gull Lake Basal Cantuar Sand	300.2	8.82	47		8.79 MPa @ 47°C
Gull Lake Central Upper Shaunavon	387.1	8.82	51		
Gull Lake North Upper Shaunavon	365.8	8.82	48	11.11	1.10 MPa @ 46°C
Gull Lake South Upper Shaunavon	402.3	8.82	52	11.71	
Gully Lake Waseca Sand	+103.6				
Handsworth Alida Beds	536.4	8.60	51	10.99	

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Hartaven Frobisher-Alida Beds	577.6	8.60	56	11.58	
Hastings East Frobisher Beds	598.7				
Hastings Frobisher Beds	643.1	6.79	49	11.65	11.65 MPa @ 50°C
Hazelwood Tilston Beds	425.2	8.37	43	9.53	
Hazelwood West Tilston Beds	425.6				
Hazlet Roseray Sand	205.7	9.05	47	9.13	5.60 MPa @ 47°C
Hearts Hill Bakken Sand	64.9				
Hoffer Ratcliffe Beds (Lower)	1248.2	8.60		19.47	
Hoffer Ratcliffe Beds (Upper)	1231.4	8.60		19.33	
Hoosier Bakken Sand	150.9	9.50			
Hume Frobisher Beds	739.1	8.60	64	13.21	
Hume Midale Beds	723.9	8.60		14.23	
Hummingbird Bakken Sand	1485.4				
Hummingbird Birdbear	1585.0	8.14	82	23.16	8.09 MPa @ 82°C
Hummingbird Ratcliffe Beds	1155.2	8.60	71	18.70	6.03 MPa @ 71°C
Huntoon Frobisher Beds	754.4	8.60	61		
Huntoon Midale Beds	737.6	8.60	55		
Illerbrun Upper Shaunavon	414.5	8.82	49	11.86	3.15 MPa @ 49°C
Ingoldsby Frobisher-Alida Beds	548.6	7.89	46	10.51	4.81 MPa @ 45°C
Ingoldsby West Frobisher-Alida Beds	659.6				
Innes Frobisher Beds	719.3	8.60	63	12.98	7.78 MPa @ 61°C
Instow Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Java Cantuar Sand	242.3				
Johnston Upper Shaunavon	371.9	8.82	48	9.24	
Kenosee Tilston Beds	426.7	7.92	46	9.38	
Kerrobert Viking Sand	3.0				
Kisbey Birdbear	1018.3				
Lake Alma Ratcliffe Beds	1268.0	8.37	67	20.27	
Landrose McLaren Sand	+144.8				
Landrose Waseca Sand	+129.5				
Lashburn South Sparky Sand	+93.7				
Lashburn South Waseca Sand	+117.3				
Lashburn Waseca Sand	+126.5				
Lashburn West Sparky Sand	+81.4				
Leitchville Shaunavon	452.6	8.60	50	12.51	4.78 MPa @ 49°C
Leon Lake Shaunavon	457.2	8.60	52	10.69	5.52 MPa @ 41°C
Lightning Tilston Beds	449.6	7.92	46	9.39	
Lloydminster Sparky Sand	+83.8				
Lone Rock Sparky Sand	+71.6				
Lost Horse Hill Frobisher-Alida Beds	559.3	8.14	57	11.40	3.36 MPa @ 55°C
Lougheed Midale Beds	807.7	8.14	61		
Loverna Detrital	126.5	8.60			

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Low Lake Waseca Sand	+111.3				
Lucky Hills Viking	7.6	8.37			
Luseland Bakken Sand	44.9				
Macklin Sparky Sand	39.6				
Macoun Midale Beds	946.4	8.82	63		9.32 MPa @ 63°C
Macoun West Midale Beds	978.3				
Maidstone McLaren Sand	+126.1				
Maidstone Waseca Sand	+113.4				
Main Success Roseray Sand	225.6	8.60	50	9.06	8.67 MPa @ 59°C
Manito Lake Sparky Sand	+27.7				
Marsden South Sparky Sand	+31.7				
Marsden Sparky Sand	+36.1				
Melrose Frobisher-Alida Beds	551.7	8.14	54		
Midale Central Frobisher Beds	786.4	7.69	63	14.31	5.24 MPa @ 57°C
Midale Central Midale Beds	800.1	7.92	63	14.31	6.09 MPa @ 63°C
Minard Midale Beds	738.5				
Moose Mountain Tilston Beds	435.9	8.48	46	9.45	3.14 MPa @ 41°C
Moose Valley Tilston Beds	428.2	8.60			
Morrisview Frobisher-Alida Beds	661.4	8.37	48	12.37	
Neilburg McLaren Sand	+103.9				
Neptune Ratcliffe Beds	1034.8	8.37			
North Antler Midale Beds	658.4	8.14	56	13.98	
Northgate Frobisher Beds	1033.3	8.14	63		
Northgate Midale Beds	1021.1	7.24	71	18.03	14.48 MPa @ 70°C
North Handsworth Alida Beds	538.0	8.60	55	11.08	
North Hoosier Bakken Sand	135.3	9.50	31	7.74	7.79 MPa @ 31°C
North Hoosier Basal Blairmore Sand	120.4	9.34	29	5.85	
Northminster North G.P. Sand	+83.2				
Northminster North Sparky Sand	+94.1				
Northminster Sparky Sand	+91.4				
North Premier Roseray Sand	228.6	8.60	47	9.25	3.12 MPa @ 47°C
North Premier Upper Shaunavon	310.9	8.82	57	10.31	0.89 MPa @ 49°C
North Smiley Bakken Sand	97.0				
Nottingham Alida Beds	548.6	7.15	43	10.60	10.66 MPa @ 44°C
Notukeu Upper Shaunavon	461.2				
Oakley Frobisher Beds	582.2	6.72	46	10.95	10.95 MPa @ 47°C
Oungre Ratcliffe Beds	1188.7	8.14	70	18.96	8.07 MPa @ 74°C
Parkman Souris Valley Beds	416.1	8.37	49	9.09	
Parkman South Tilston-Souris Valley Beds	455.7	8.23	38	9.45	
Parkman Tilston Beds	442.0	7.92	43	9.51	2.79 MPa @ 43°C
Parkman Tilston-Souris Valley Beds	402.3	7.92	38	9.10	2.41 MPa @ 38°C
Pennant Upper Shaunavon	265.2	9.05			

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Pikes Peak G.P. Sand	+81.0				
Pikes Peak Sparky Sand	+91.4				
Pikes Peak Waseca Sand	+123.4				
Pinto Frobisher Beds	1036.3	7.01	66	16.55	
Pinto Midale Beds	1024.1	7.01	70	17.24	13.85 MPa @ 70°C
Plato North Viking Sand	20.8				
Plato Viking Sand	9.1	8.37	24	6.89	3.28 MPa @ 21°C
Plover Lake Bakken Sand	86.6				
Prairiedale Viking Sand	22.1				
Queensdale East Frobisher-Alida Beds	573.0	5.78	47	10.84	7.72 MPa @ 46°C
Queensdale North Alida Beds	588.3	7.58	49	10.85	
Queensdale West Alida Beds	600.5	7.58	48	11.25	11.24 MPa @ 48°C
Ralph Midale Beds	723.9	7.92			
Rapdan Upper Shaunavon	449.6	8.60	49	13.72	5.61 MPa @ 56°C
Rapdan West Upper Shaunavon	471.0				
Red Jacket Shaunavon-Gravelbourg	82.7				
Rocanville Bakken Sand	160.0	8.37	27	6.23	
Roncott Bakken Sand	1121.7	8.08	59		2.05 MPa @ 52°C
Rosebank Alida Beds	536.4	7.19	44	10.49	
Rosebank South Alida Beds	533.4	7.46	43		
Rush Lake Sparky Sand	+88.3				
Rush Lake Waseca Sand	+113.9				
Salt Lake Lloydminster Sand	56.2				
Senlac Lloydminster Sand	78.2				
Sherwood Frobisher Beds	701.0	7.92	56	12.27	8.76 MPa @ 56°C
Silverdale Sparky Sand	+68.6				
Silverton Frobisher Beds	618.7	8.37	49		
Skinner Lake Ratcliffe Beds	1008.9	8.37			
Smiley Dewar Viking	15.2	7.99	23	6.47	6.36 MPa @ 22°C
Smiley Dewar Viking Chert	18.3	7.99	23	6.49	
Souris Flat Frobisher Beds	789.4	8.28	59	13.34	11.82MPa @ 59°C
South Fletwode Tilston Beds	429.8	7.92	44	9.45	
South Success Roseray Sand	231.0	8.60	51	8.96	8.96 MPa @ 53°C
Standard Hill Waseca Sand	+109.7				
Star Valley Frobisher-Alida Beds	536.4	7.46	52	10.82	8.61 MPa @ 52°C
Steelman Frobisher Beds	853.4	7.01	67	14.36	
Steelman Midale Beds	853.4	7.01	67	14.34	14.34 MPa @ 63°C
Storthoaks Alida-Tilston Beds	493.8	7.92	38	9.80	8.09 MPa @ 42°C
Stoughton Frobisher-Alida Beds	644.7	7.46	61	12.07	8.09 MPa @ 62°C
Stoughton South Frobisher Beds	647.7	7.46		14.13	
Success North Roseray Sand	236.9				
Success Roseray Sand Alpha	219.5	8.60	51	8.76	7.86 MPa @ 51°C

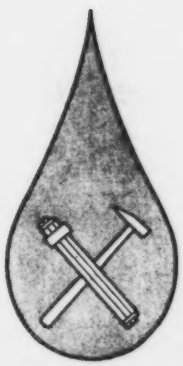
INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Suffield Roseray Sand	259.1	8.60	52	12.98	7.41 MPa @ 44°C
Suffield Upper Shaunavon	318.5	8.82	50	10.82	
Tangleflags East McLaren Sand	+139.6				
Tangleflags G.P. Sand	+100.6				
Tangleflags Lloydminster Sand	+61.0				
Tangleflags McLaren Sand	+141.4				
Tangleflags North Cummings Sand	+50.3				
Tangleflags North G.P. Sand	+99.1				
Tangleflags North Lloydminster Sand	+51.8				
Tangleflags Sparky Sand	+109.7				
Tangleflags West G.P. Sand	+102.9				
Tangleflags West Lloydminster Sand	+62.4				
Tangleflags West McLaren Sand	+146.8				
Tangleflags West Sparky Sand	+113.5				
Tatagwa Midale Beds	857.4				
Tatagwa North Midale Beds	817.4				
Verlo Roseray Sand	213.4	8.82	52	9.14	9.24 MPa @ 39°C
Viewfield Frobisher Beds	670.6	8.69	65	12.22	9.03 MPa @ 65°C
View Hill Midale Beds	957.1	8.75	76	15.69	
Wapella Sand	76.2	8.37	32	5.25	0.34 MPa @ 29°C
Warmley Alida Beds	496.2	8.37	54	10.15	
Wauchope Alida-Tilston Beds	524.1				
Wauchope North Tilston Beds	458.3				
Weir Hill Frobisher Beds	762.0	7.24			
Westhazel G.P. Sand	+90.1				
Westhazel Sparky Sand	+103.8				
West Innes Frobisher Beds	722.4	8.60	64	13.07	
West Kingsford Midale Beds	876.3	7.01	67	14.82	9.40 MPa @ 67°C
Weyburn Frobisher Beds	807.7	8.14	61		
Weyburn Midale Beds	807.7	8.14	61	14.60	
White Bear Tilston Beds	445.0	7.92	43	9.74	
White Bear Tilston-Souris Valley Beds	457.2	8.37	39	9.47	2.41 MPa @ 39°C
Whitemud Shaunavon	469.4	9.05	54	13.79	5.52 MPa @ 41°C
Whiteside Viking Sand	36.6	7.92	24	8.38	
Wildwood Alida Beds	582.2	8.37	48	10.77	
Willmar Frobisher Alida Beds	661.4	7.24	54	11.87	11.32 MPa @ 53°C
Winmore Frobisher Beds	641.6	8.60		11.23	
Winter Cummings Sand	36.9				
Workman Midale Beds	685.8	7.24	54	14.75	7.64 MPa @ 53°C
Workman Frobisher Beds	701.0	7.69	54	12.27	6.55 MPa @ 59°C

INITIAL GAS POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	TEMPERATURE AT DATUM DEPTH °C	PSEUDO-REDUCED TEMPERATURE	PSEUDO-REDUCED PRESSURE	VIRGIN PRESSURE AT DATUM DEPTH kPa
Bayhurst Viking Gas Pool	+9.1	25	1.61	1.47	6700
Bayhurst West Viking Gas Pool	-7.6	28	1.60	1.47	6720
Beacon Hill Mannville Sand Gas Pool	+256.0	21	1.56	0.47	2170
Beacon Hill West Mannville Sand Gas Pool	+241.7	21	1.56	0.46	2351
Beverley East Cantuar Gas Pool	+170.0	46	1.67	2.11	9650
Bigstick Second White Specks Gas Pool	+101.2	26	1.59	0.46	6105
Bronson Lake Colony Sand Gas Pool	+197.7	16	1.54	0.59	2706
Bronson Lake Waseca Sand Gas Pool	+183.6	17	1.54	0.62	2846
Brock Viking Sand Gas Pool	-3.0	28	1.59	1.46	6690
Brock East Viking Gas Pool	-7.6	29	1.62	1.55	7060
Burstall Medicine Hat Sand Gas Pool	+231.5	17	1.53	0.94	4309
Burstall Milk River Gas Pool	+278.8	16	1.53	0.75	3447
Burstall North Viking Sand Gas	-11.0	27	1.71	1.59	7782
Cavalier Spinney Hill Sand Gas Pool	+162.1	18	1.60	0.70	3140
Coleville-Smiley Viking Sand Gas Pool	+12.2	24	1.50	1.40	6480
Dodsland North Viking Gas Pool	+21.3	23	1.50	1.33	6110
Driver Bakken Sand Gas Pool	-100.4	27	1.58	1.53	7079
Driver Mannville Sand Gas Pool	-49.9	27	1.60	1.50	6804
Fort Pitt Mannville Sand Gas Pool	+191.0	20	1.79	0.61	2790
Fort Pitt North Mannville Sand Gas Pool	+198.9	19	1.77	0.62	2850
Glidden Viking Gas Pool	-1.5	22	1.57	1.47	6690
Greenan Viking Gas Pool	-15.2	28	1.61	1.45	6580
Gull Lake Cantuar Gas Pool	-259.1	43	1.59	2.05	9480
Hatton Medicine Hat Sand Gas Pool	+274.3	17	1.53	0.94	4310
Hatton Milk River Gas Pool	+321.6	16	1.53	0.75	3450
Hoosier Viking Sand Gas Pool	-18.3	26	1.52	1.43	6560
Liebenthal Milk River Gas Pool	+297.2	16	1.53	0.79	3630
Lloydminster Colony Sand Gas Pool	+134.1	23	1.54	0.70	3260
Marengo Viking Gas Pool	-10.7	21	1.48	1.47	6740
Milton Viking Sand Gas Pool	-18.3	23	1.49	1.42	6550
Pierceland Mannville Sand Gas Pool	+256.0	21	1.56	0.46	2100
Senate Second White Specks Gas Pool	+121.9	29	1.61	1.39	6281
Tangleflags Colony Sand Gas Pool	+159.1	20	1.61	0.69	3119
Tangleflags McLaren Sand Gas Pool	+149.3	21	1.55	0.71	3247
Tangleflags Second White Specks Gas Pool	+274.0	18	1.54	0.67	3057
Tangleflags St. Walburg Sand Gas Pool	+254.0	18	1.55	0.73	3345
Totnes Viking Gas Pool	-3.0	24	1.59	1.50	6830
Whiteside Ribstone Creek Sand Gas Pool	+481.6	20	1.53	0.43	2000
Whiteside West Ribstone Creek Sand Gas Pool	+485.3	14	1.53	0.27	1240
Whiteside West Viking Sand Gas Pool	-14.4	27	1.51	1.24	5940

MPR FACTORS



MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
232501	Aberfeldy G.P. Sand Pool	30	90	1	40
232106	Aberfeldy Sparky Sand Pool	30	90	1	40
433007	Alameda Midale Beds Pool	35	75	2	80
435191	Alameda West Frobisher Beds Pool	35	75	2	80
433036	Alameda West Midale Beds Pool	35	72	2	80
435038	Alida East Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
435785	Alida North Alida Beds Pool	35	75	1	40
435044	Alida West Frobisher-Alida Beds Pool	35	77	1	40
239022	Alsask Basal Blairmore Sand Pool	25	75	1	40
314552	Antelope Lake East Roseray Sand Pool	30	93	2	80
331064	Antelope Lake Upper Shaunavon Pool	25	93	2	80
435024	Arcola Frobisher-Alida Beds Pool	35	79	1	40
435040	Auburnton Frobisher-Alida Beds Pool	35	75	1	40
227331	Avon Hill Viking Pool	35	90	1	40
232135	Baldwinton Sparky Sand Pool	30	90	1	40
430073	Battle Creek Madison Pool	25	90	2	80
331001	Battle Creek South Upper Shaunavon Pool	25	90	2	80
331072	Battle Creek Upper Shaunavon Pool	25	90	2	80
314553	Battrum North Roseray Sand Pool	41	97.5	1	40
314546	Battrum Roseray Sand Pool (Upper)	41	97.5	1 & 2	40 & 80
	(Main)	17	97.5	1 & 2	40 & 80
331060	Bench Upper Shaunavon Pool	25	75	4	160
433076	Benson East Midale Beds Pool	50	89	2	80
433075	Benson Midale Beds Pool	50	89	2 & 4	80 & 160
238146	Beverley Cantuar Sand Pool	30	90	2	80
238152	Beverley East Cantuar Sand Pool	30	90	2	80
238148	Beverley North Cantuar Sand Pool	30	90	1 & 2	40 & 80
314641	Beverley Upper Roseray Sand Pool	35	90	1	40
433035	Bienfait Midale Beds Pool	35	85	2	80
231202	Big Gully McLaren Sand Pool	30	90	1	40
234120	Big Gully North Lloydminster Sand Pool	30	90	1	40
231309	Big Gully Waseca Sand Pool	30	90	1	40
331050	Bone Creek Upper Shaunavon Pool	15	94	2	80
433089	Bromhead Midale Beds Pool	35	75	4	160
435019	Browning Frobisher-Alida Beds Pool	35	75	2	80
435172	Bryant Frobisher Beds Pool	35	75	4	160
433099	Bryant Midale Beds Pool	35	89	4	160
441422	Buffalo Coulee Bakken Sand Pool	25	93	1/2	20
441428	Buffalo Coulee North Bakken Sand Pool	25	93	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
331059	Butte Upper Shaunavon Pool	25	96	2	80
234133	Buzzard Lloydminster Sand Pool	30	90	1	40
441426	Cactus Lake Basal Mannville - Bakken Sand Pool	25	95	1	40
435005	Cantal Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
435039	Cantal South Frobisher-Alida Beds Pool	35	75	2	80
238143	Cantuar East Cantuar Sand Pool	30	90	2	80
314550	Cantuar East Roseray Sand Pool	35	90	2	80
314741	Cantuar Lower Roseray Sand Pool	35	95	1	40
238141	Cantuar Main Cantuar Sand Pool	30	90	1	40
314555	Cantuar North Roseray Sand Pool	35	95	2	80
435180	Carnduff Frobisher Beds Pool	35	75	2	80
433006	Carnduff Midale Beds Pool	35	75	2	80
232511	Celtic G.P. Sand Pool	30	90	1	40
230903	Celtic Mannville Sands Pool	30	90	1	40
232122	Celtic Sparky Sand Pool	30	90	1	40
231313	Celtic Waseca Sand Pool	30	90	1	40
331073	Chambery Upper Shaunvon Pool	20	91	4	160
435021	Clarilaw Frobisher-Alida Beds Pool	35	75	2	80
435041	Clarilaw West Frobisher-Alida Beds Pool	35	75	1	40
330062	Clintonville Shaunavon Pool	25	90	4	160
441421	Coleville Bakken Sand Pool	15	93	1/2	20
230026	Coleville Mannville Sand Pool	25	90	1	40
441429	Coleville South Bakken Sand Pool	15	93	1	40
230027	Coleville South Mannville Sand Pool	25	90	1	40
234122	Cosine Lake Lloydminster Sand Pool	30	90	1	40
441431	Court Bakken Sand Pool	25	95	1	40
331055	Covington Upper Shaunavon Pool	15	94	2	80
331071	Covington West Upper Shaunavon Pool	25	75	4	160
438030	Crystal Hill Souris Valley Beds Pool	40	90	1	40
435028	Dalesboro Frobisher-Alida Beds Pool	35	78	2	80
230909	Dee Valley East Mannville Sands Pool	30	90	1	40
232125	Dee Valley East Sparky Sand Pool	30	90	1	40
231316	Dee Valley East Waseca Sand Pool	30	90	1	40
231310	Dee Valley Waseca Sand Pool	30	90	1	40
331046	Delta Upper Shaunavon Pool	25	93	2	80
227327	Dodsland Viking Sand Pool	35	90	1	40
335001	Dollard Lower Shaunavon Pool	25	95	2 & 4	80 & 160
331041	Dollard Upper Shaunavon Pool	5	91	2 & 4	80 & 160
230025	Druid Mannville Sands Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
232109	Dulwich North Sparky Sand Pool	30	90	1/2	20
232102	Dulwich Sparky Sand Pool	30	90	1/4	10
231324	Ear Lake Waseca Sand Pool	30	90	1	40
331056	Eastbrook Upper Shaunavon Pool	20	91	2	80
330074	Eastend Shaunavon Pool	20	91	2 & 4	80 & 160
231320	Edam Waseca Sand Pool	30	90	1	40
230904	Edam West Mannville Sands Pool	30	90	1/2	20
232141	Edam West Sparky/G.P. Sand Pool	30	90	1/2	20
231323	Edam West Waseca Sand Pool	30	90	1/2	20
437032	Edenvale Tilston Beds Pool	40	90	2	80
435184	Elmore Frobisher Beds Pool	45	86	2	80
433018	Elmore Midale Beds Pool	35	75	2	80
433001	Elswick Midale Beds Pool	35	88	2	80
232504	Epping G.P. Sand Pool	30	90	1/2 & 1	20 & 40
232104	Epping Sparky Sand Pool	30	90	1/2 & 1	20 & 40
227323	Eureka Viking Pool	35	90	1	40
231208	Evesham North McLaren Sand Pool	30	90	1	40
232145	Evesham North Sparky Sand Pool	30	90	1	40
232142	Evesham Sparky Sand Pool	30	90	1	40
235002	Eyehill Cummings Sand Pool	30	90	1	40
437037	Fertile Tilston Beds Pool	40	90	1	40
437580	Fertile Tilston-Souris Valley Beds Pool	40	90	1	40
432085	Flat Lake Ratcliffe Beds Pool	35	80	4	160
435187	Florence Frobisher Beds Pool	35	75	2	80
230902	Forest Bank Mannville Sands Pool	30	90	1	40
232123	Forest Bank Sparky Sand Pool	30	90	1	40
231305	Forest Bank Waseca Sand Pool	30	90	1	40
227338	Forgan Viking Sand Pool	35	90	1	40
314541	Fosterton Roseray Sand Pool	16	95	1	40
238151	Fosterton South Cantuar Sand Pool	30	90	1	40
314554	Fosterton South Roseray Sand Pool	16	95	1	40
432090	Freda Lake Ratcliffe Beds Pool	35	90	2	80
232130	Freemont Sparky Sand Pool	30	90	1	40
231315	Freemont Waseca Sand Pool	30	90	1	40
435082	Freestone Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
437581	Frys East Tilston-Souris Valley Beds Pool	40	90	1	40
437579	Frys Tilston-Souris Valley Beds Pool	40	90	1	40
232113	Furness Sparky Sand Pool	30	90	1/4	10
441425	Fusilier Bakken Sand Pool	25	95	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
435009	Gainsborough Frobisher-Alida Beds Pool	30	75	2	80
435181	Glen Ewen Frobisher Beds Pool	35	75	2	80
433008	Glen Ewen Midale Beds Pool	35	75	2 & 4	80 & 160
230906	Golden Lake North Mannville Sands Pool	30	90	1	40
232112	Golden Lake North Sparky Sand Pool	30	90	1	40
231306	Golden Lake North Waseca Sand Pool	30	90	1	40
230908	Golden Lake South Mannville Sands Pool	30	90	1	40
232107	Golden Lake South Sparky Sand Pool	30	90	1	40
231308	Golden Lake South Waseca Sand Pool	30	90	1	40
435168	Griffin Frobisher Beds Pool	35	89	2	80
238142	Gull Lake Basal Cantuar Sand Pool	35	92	1	40
331058	Gull Lake Central Upper Shaunavon Pool	25	97	2	80
331043	Gull Lake North Upper Shaunavon Pool	25	97	1	40
331057	Gull Lake South Upper Shaunavon Pool	25	97	4	160
231307	Gully Lake Waseca Sand Pool	30	90	1	40
435761	Handsworth Alida Beds Pool	35	75	2	80
435087	Hartaven Frobisher-Alida Beds Pool	40	89	1	40
435190	Hastings East Frobisher Beds Pool	35	75	2	80
435177	Hastings Frobisher Beds Pool	35	75	1 & 2	40 & 80
437027	Hazelwood Tilston Beds Pool	40	90	1	40
437028	Hazelwood West Tilston Beds Pool	40	90	1	40
314548	Hazlet Roseray Sand Pool	21	94.7	2	80
441430	Hearts Hill Bakken Sand Pool	25	95	1	40
432094	Hoffer Ratcliffe Beds Pool	35	80	2 & 4	80 & 160
441424	Hoosier Bakken Sand Pool	25	95	1	40
435167	Hume Frobisher Beds Pool	35	89	4	160
433091	Hume Midale Beds Pool	35	89	2 & 4	80 & 160
441478	Hummingbird Bakken Sand Pool	25	95	2	80
521029	Hummingbird Birdbear Pool	25	83	2	80
432088	Hummingbird Ratcliffe Beds Pool	25	75	2	80
435163	Huntoon Frobisher Beds Pool	50	89	2 & 4	80 & 160
	(East Group)	35	89	2 & 4	80 & 160
433079	Huntoon Midale Beds Pool	50	89	2 & 4	80 & 160
331054	Illerbrun Upper Shaunavon Pool	15	94	4	160
435003	Ingoldsby Frobisher-Alida Beds Pool	35	89	1 & 2	40 & 80
435042	Ingoldsby West Frobisher-Alida Beds Pool	35	75	1	40
435165	Innes Frobisher Beds Pool	35	89	2	80
331049	Instow Upper Shaunavon Pool	5	94	2	80
238150	Java Cantuar Sand Pool	30	90	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
331042	Johnston Upper Shaunavon Pool	25	97	1	40
437016	Kenosee Tilston Beds Pool	40	90	2	80
227342	Kerrobert Viking Sand Pool	35	90	1	40
521034	Kisbey Birdbear Pool	40	75	2	80
432086	Lake Alma Ratcliffe Beds Pool	35	80	2	80
231201	Landrose McLaren Sand Pool	30	90	1/2 & 1	20 & 40
231301	Landrose Waseca Sand Pool	30	90	1/2 & 1	20 & 40
232129	Lashburn South Sparky Sand Pool	30	90	1	40
231314	Lashburn South Waseca Sand Pool	30	90	1	40
231303	Lashburn Waseca Sand Pool	30	90	1	40
232137	Lashburn West Sparky Sand Pool	30	90	1	40
330047	Leitchville Shaunavon Pool	35	90	2 & 4	80 & 160
330048	Leon Lake Shaunavon Pool	25	90	4	160
437023	Lightning Tilston Beds Pool	40	90	1	40
232124	Lloydminster Sparky Sand Pool	30	90	1/2	20
232103	Lone Rock Sparky Sand Pool	30	90	1/4	10
435073	Lost Horse Hill Frobisher-Alida Beds Pool	45	89	1 & 2	40 & 80
433081	Lougheed Midale Beds Pool	35	89	2	80
240024	Loverna Detrital Pool	25	75	1	40
231302	Low Lake Waseca Sand Pool	30	90	1/2	20
227335	Lucky Hills Viking Pool	35	90	1 & 2	40 & 80
441432	Luseland Bakken Sand Pool	25	95	1	40
232126	Macklin Sparky Sand Pool	30	90	1	40
433095	Macoun Midale Beds Pool	35	89	4	160
433069	Macoun West Midale Beds Pool	40	89	4	160
231205	Maidstone McLaren Sand Pool	30	90	1	40
231322	Maidstone Waseca Sand Pool	30	90	1	40
314543	Main Success Roseray Sand Pool	30	93	1	40
232143	Manito Lake Sparky Sand Pool	30	90	1	40
232138	Marsden South Sparky Sand Pool	30	90	1	40
232105	Marsden Sparky Sand Pool	30	90	1/4	10
435080	Melrose Frobisher-Alida Beds Pool	45	89	1	40
435161	Midale Central Frobisher Beds Pool	50	89	2	80
433072	Midale Central Midale Beds Pool	50	89	2	80
433070	Minard Midale Beds Pool	35	89	4	160
437014	Moose Mountain Tilston Beds Pool	40	90	1	40
437076	Moose Valley Tilston Beds Pool	40	90	2	80
435031	Morrisview Frobisher-Alida Beds Pool	35	80	2	80
231203	Neilburg McLaren Sand Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
432092	Neptune Ratcliffe Beds Pool	35	80	4	160
433026	North Antler Midale Beds Pool	35	75	2	80
435762	North Handsworth Alida Beds Pool	35	75	2	80
441423	North Hoosier Bakken Sand Pool	25	95	1	40
239021	North Hoosier Basal Blairmore Sand Pool	25	90	1/2	20
314542	North Premier Roseray Sand Pool	25	93	1	40
331044	North Premier Upper Shaunavon Pool	25	93	1 & 2	40 & 80
441433	North Smiley Bakken Sand Pool	25	93	1	40
435185	Northgate Frobisher Beds Pool	35	75	4	160
433020	Northgate Midale Beds Pool	35	75	2	80
232509	Northminster North G.P. Sand Pool	30	90	1	40
232134	Northminster North Sparky Sand Pool	30	90	1	40
232108	Northminster Sparky Sand Pool	30	90	1	40
435780	Nottingham Alida Beds Pool (Non-Unit)	35	75	2	80
	(Unit)	22	75	2	80
331074	Notukeu Upper Shaunavon Pool	25	75	4	160
435178	Oakley Frobisher Beds Pool	35	75	2	80
432083	Oungre Ratcliffe Beds Pool	35	80	2	80
438022	Parkman Souris Valley Beds Pool	50	90	2	80
437578	Parkman South Tilston-Souris Valley Beds Pool	40	90	2	80
437013	Parkman Tilston Beds Pool	40	90	1	40
437576	Parkman Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
331061	Pennant Upper Shaunavon Pool	25	95	2	80
232507	Pikes Peak G.P. Sand Pool	30	90	1	40
232128	Pikes Peak Sparky Sand Pool	30	90	1	40
231312	Pikes Peak Waseca Sand Pool	30	90	1	40
435182	Pinto Frobisher Beds Pool	35	75	2	80
433015	Pinto Midale Beds Pool	35	75	2	80
227340	Plato North Viking Pool	35	90	1	40
227333	Plato Viking Pool	35	90	1	40
441427	Plover Lake Bakken Sand Pool	25	95	1	40
227343	Prairiedale Viking Sand Pool	35	90	1	40
435010	Queensdale East Frobisher-Alida Beds Pool	35	85	1	40
435782	Queensdale North Alida Beds Pool	35	75	1	40
435781	Queensdale West Alida Beds Pool	35	75	1	40
433097	Ralph Midale Beds Pool	35	89	2	80
331045	Rapdan Upper Shaunavon Pool	20	91	2 & 4	80 & 160
330063	Rapdan West Shaunavon Pool	20	91	4	160

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
354902	Red Jacket Gravelbourg Pool	38	98	2	80
336501	Red Jacket Shaunavon-Gravelbourg Pool	38	98	1	40
441476	Rocanville Bakken Sand Pool	35	75	1	40
441477	Roncott Bakken Sand Pool	25	94	2	80
435779	Rosebank Alida Beds Pool	35	79	1 & 2	40 & 80
435778	Rosebank South Alida Beds Pool	35	79	2	80
230905	Rush Lake Mannville Sands Pool	30	90	1	40
232140	Rush Lake Sparky Sand Pool	30	90	1	40
231321	Rush Lake Waseca Sand Pool	30	90	1	40
234142	Salt Lake Lloydminster Sand Pool	30	90	1	40
234139	Senlac Lloydminster Sand Pool	30	90	1	40
435164	Sherwood Frobisher Beds Pool	35	86	1 & 2	40 & 80
232101	Silverdale Sparky Sand Pool	30	90	1/4 & 1/2 & 1	10 & 20 & 40
435179	Silverton Frobisher Beds Pool	35	75	2	80
432096	Skinner Lake Ratcliffe Beds Pool	35	80	4	160
227023	Smiley-Dewar Viking Pool	35	90	1	40
435186	Souris Flat Frobisher Beds Pool	35	75	2	80
437002	South Fletwode Tilston Beds Pool	40	90	1	40
314545	South Success Roseray Sand Pool	30	93	1	40
231311	Standard Hill Waseca Sand Pool	30	90	1	40
435001	Star Valley Frobisher-Alida Beds Pool	35	81	1	40
435176	Steelman Frobisher Beds Pool	35	75	2	80
433004	Steelman Midale Beds Pool	35	72	2	80
436276	Storthoaks Alida-Tilston Beds Pool (Alida)	35	79	2	80
	(Tilston)	40	90	2	80
435078	Stoughton Frobisher-Alida Beds Pool	35	86	2	80
435171	Stoughton South Frobisher Beds Pool	35	86	2	80
314551	Success North Roseray Sand Pool	30	93	1	40
314544	Success Roseray Sand Alpha Pool	30	93	1	40
314549	Suffield Roseray Sand Pool	35	95	1 & 2	40 & 80
331052	Suffield Upper Shaunavon Pool	25	97	2	80
231204	Tangleflags East McLaren Sand Pool	30	90	1	40
232505	Tangleflags G.P. Sand Pool	30	90	1	40
234121	Tangleflags Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags Mannville Sands Pool	30	90	1	40
231206	Tangleflags McLaren Sand Pool	30	90	1	40
235004	Tangleflags North Cummings Sand Pool	30	90	1	40
232506	Tangleflags North G.P. Sand Pool	30	90	1	40

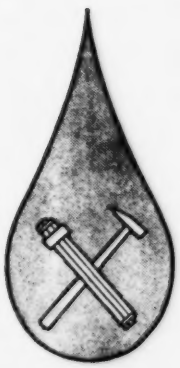
MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
234127	Tangleflags North Lloydminster Sand Pool	30	90	1	40
232114	Tangleflags Sparky Sand Pool	30	90	1	40
232508	Tangleflags West G.P. Sand Pool	30	90	1	40
234132	Tangleflags West Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags West Mannville Sands Pool	30	90	1	40
231207	Tangleflags West McLaren Sand Pool	30	90	1	40
232131	Tangleflags West Sparky Sand Pool	30	90	1	40
433098	Tatagwa Midale Beds Pool	35	92	2	80
433088	Tatagwa North Midale Beds Pool	35	92	2	80
314547	Verlo Roseray Sand Pool	21	90	2	80
435170	Viewfield Frobisher Beds Pool	35	86	1	40
433071	View Hill Midale Beds Pool	50	89	2	80
238661	Wapella Sand Pool	25	99	1	40
435784	Warmley Alida Beds Pool	35	90	2	80
436277	Wauchope Alida Tilston Beds Pool	35	75	1	40
437003	Wauchope North Tilston Beds Pool	40	90	1	40
435169	Weir Hill Frobisher Beds Pool	35	75	2	80
435166	West Innes Frobisher Beds Pool	35	89	2	80
433077	West Kingsford Midale Beds Pool	35	83.6	2	80
232510	Westhazel G.P. Sand Pool	30	90	1	40
232136	Westhazel Sparky Sand Pool	30	90	1	40
435162	Weyburn Frobisher Beds Pool	35	89	2	80
433074	Weyburn Midale Beds Pool	35	89	2	80
	(Northern Portion of Pool)	50	89	2	80
437012	White Bear Tilston Beds Pool	40	90	1	40
437577	White Bear Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
330075	Whitemud Shaunavon Pool	20	91	4	160
227326	Whiteside Viking Sand Pool	40	91	1	40
435783	Wildwood Alida Beds Pool	35	75	2	80
435011	Willmar Frobisher-Alida Beds Pool	25	78	1 & 2	40 & 80
435188	Winmore Frobisher Beds Pool	45	85	2	80
235007	Winter Cummings Sand Pool	30	90	1	40
435183	Workman Frobisher Beds Pool	35	84	2	80
433017	Workman Midale Beds Pool	35	79	2	80

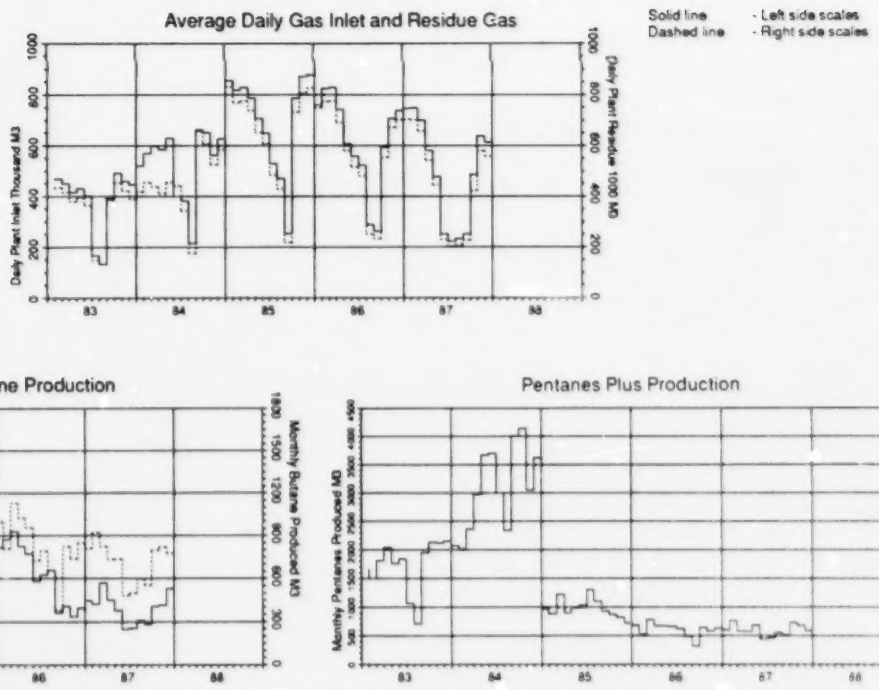
* Factors in effect on June 1, 1988

GAS PLANT

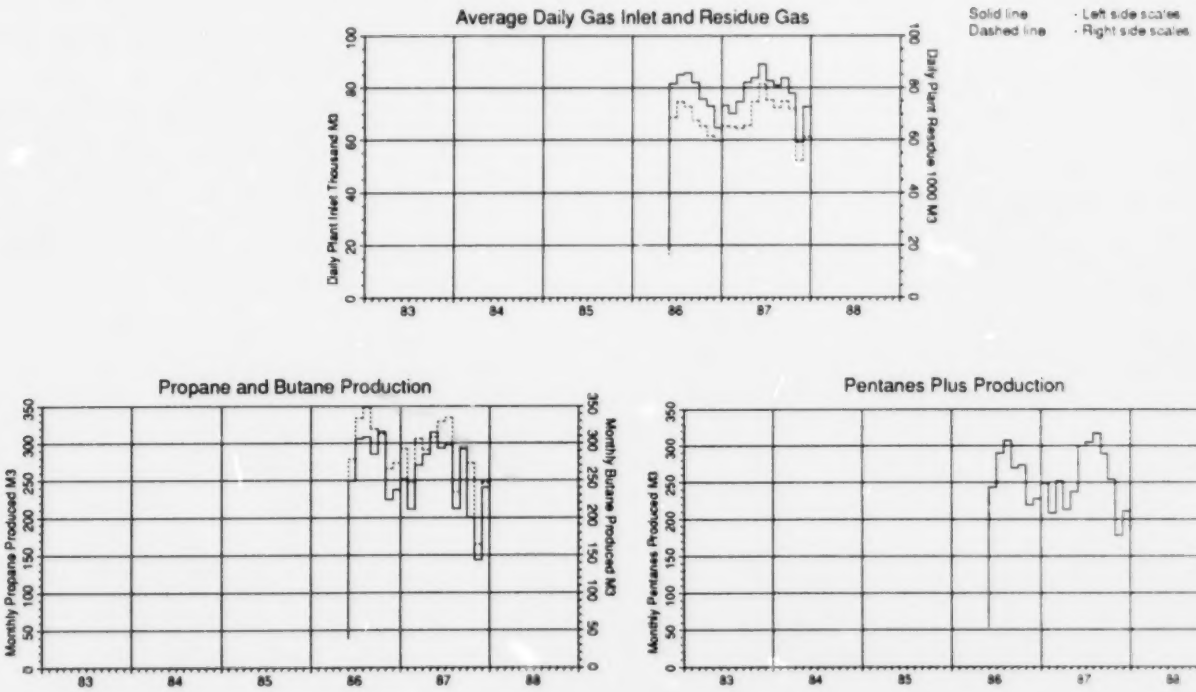
PERFORMANCE GRAPHS



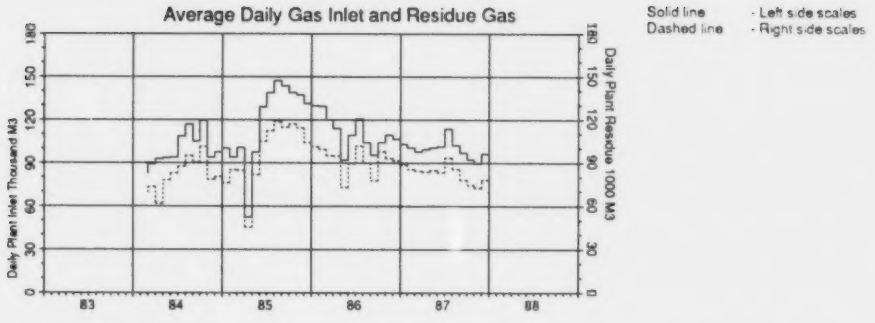
COLEVILLE GAS PLANT

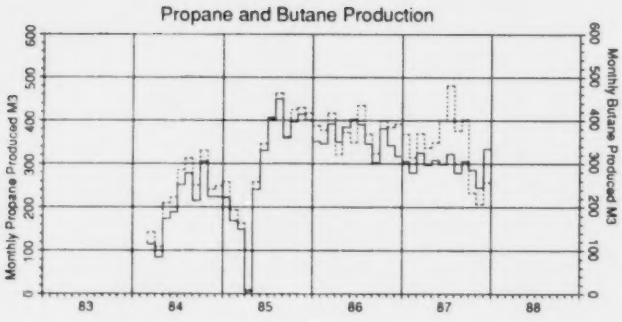


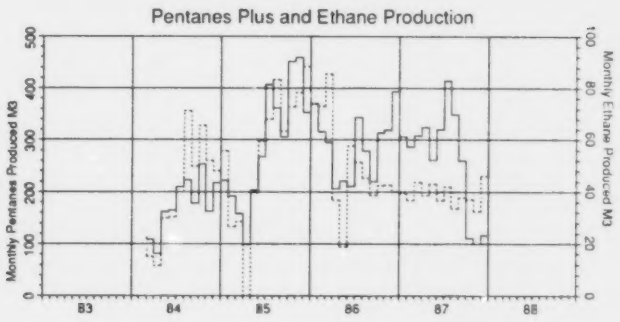
COLEVILLE (WESTAR) GAS PLANT



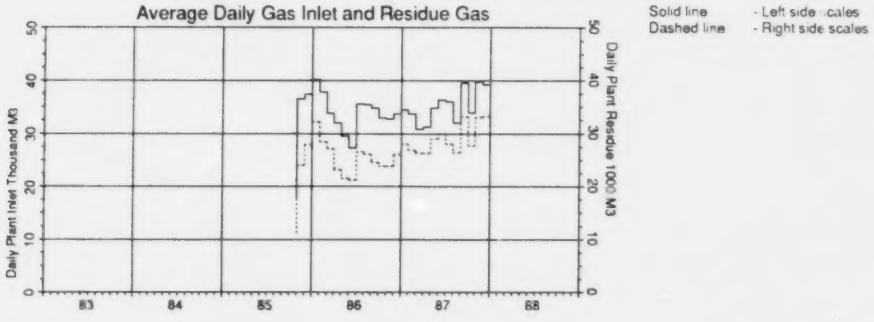
DODSLAND GAS PLANT

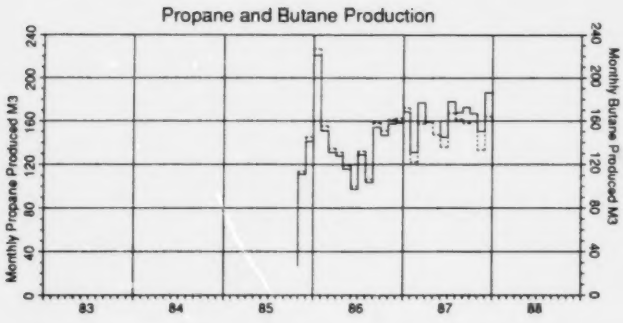

Average Daily Gas Inlet and Residue Gas
Solid line - Left side scales
Dashed line - Right side scales
Daily Plant Inlet Thousand M3
Daily Plant Residue 1000 M3
0 30 60 90 120 150 180
83 84 85 86 87 88

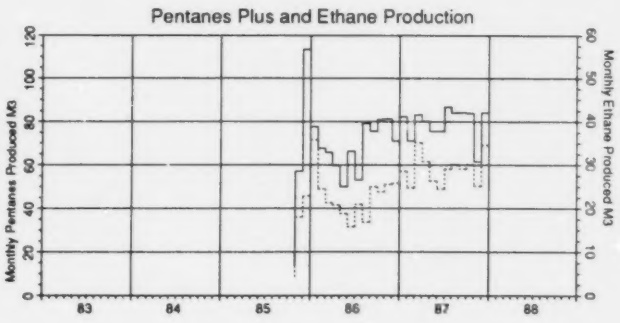

Propane and Butane Production
Monthly Propane Produced M3
Monthly Butane Produced M3
0 100 200 300 400 500 600
83 84 85 86 87 88


Pentanes Plus and Ethane Production
Monthly Pentanes Produced M3
Monthly Ethane Produced M3
0 100 200 300 400 500
0 20 40 60 80 100
83 84 85 86 87 88

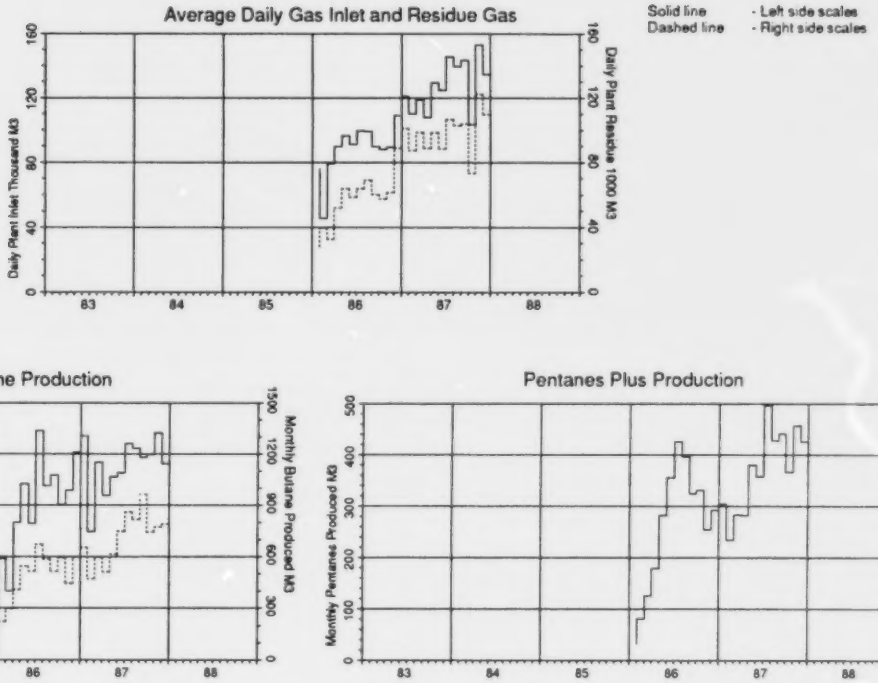
KERROBERT GAS PLANT


Average Daily Gas Inlet and Residue Gas
Solid line - Left side scales
Dashed line - Right side scales
Daily Plant Inlet Thousand M3
Daily Plant Residue 1000 M3
0 10 20 30 40 50
83 84 85 86 87 88

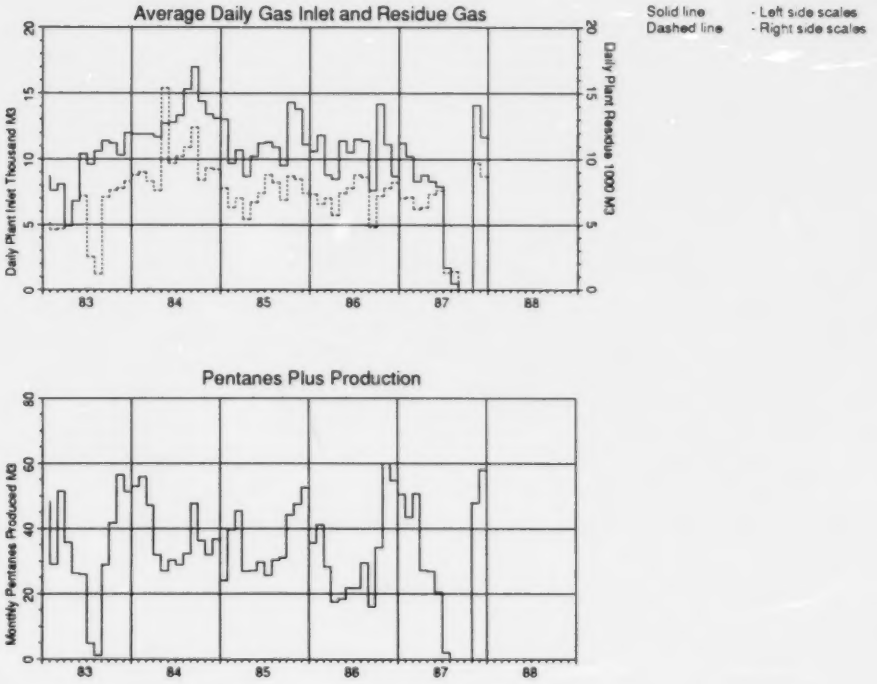

Propane and Butane Production
Monthly Propane Produced M3
Monthly Butane Produced M3
0 40 80 120 160 200 240
83 84 85 86 87 88


Pentanes Plus and Ethane Production
Monthly Pentanes Produced M3
Monthly Ethane Produced M3
0 20 40 60 80 100 120
0 10 20 30 40 50 60
83 84 85 86 87 88

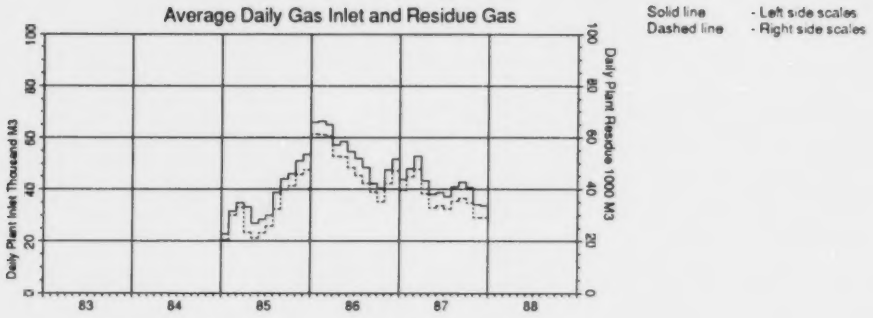
NOTTINGHAM GAS PLANT

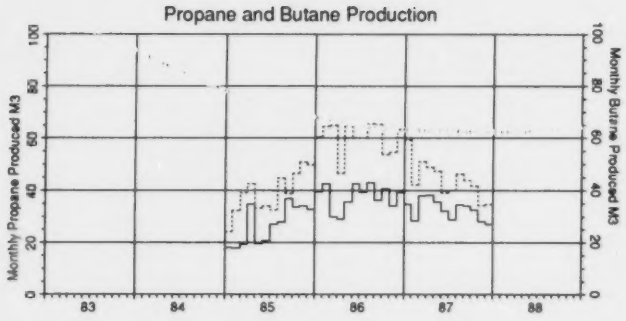


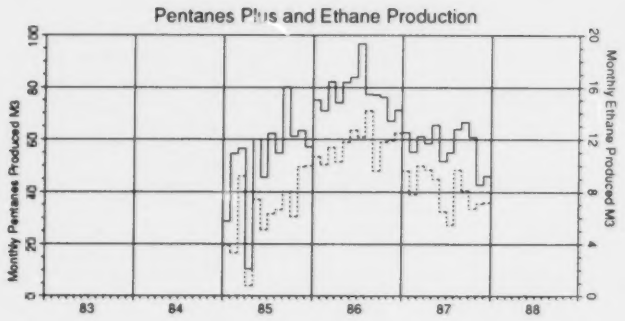
SMILEY GAS PLANT



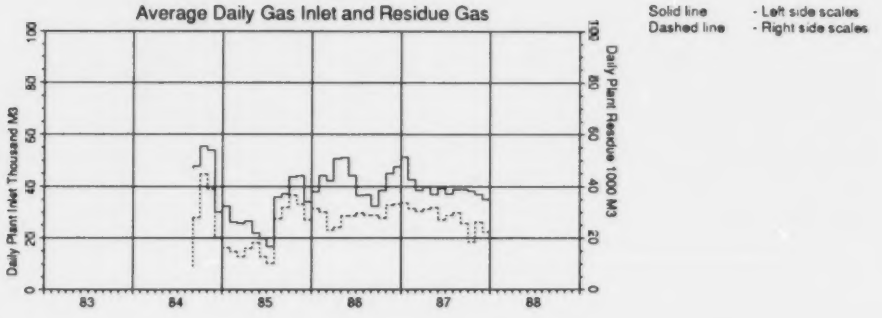
SOUTH SMILEY GAS PLANT

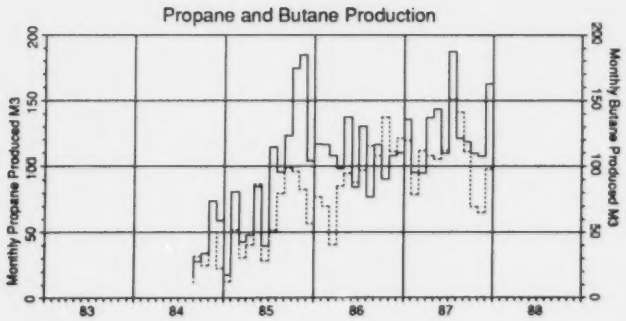


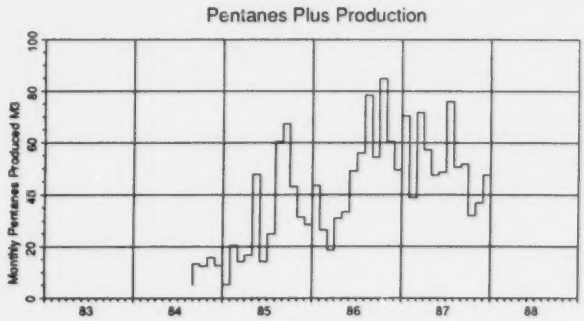




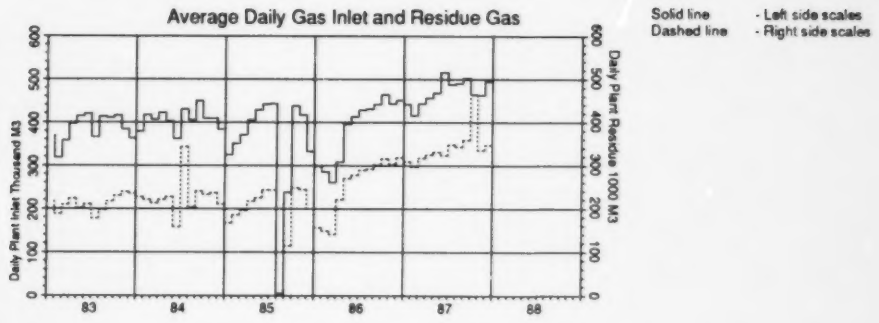
STEELMAN NORTH GAS PLANT

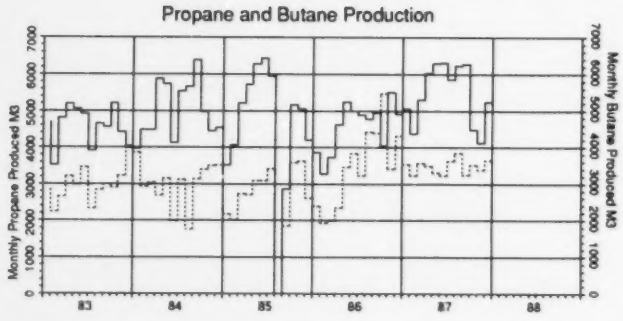


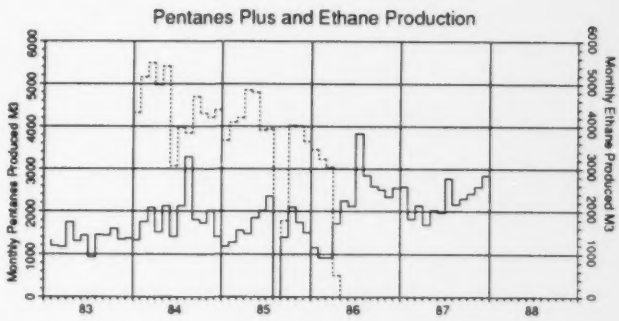




STEELMAN GAS PLANT







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